

**TITLE:**

Policy Into Practice: Explaining the Diffusion of Policy Content and Implementation across the  
U.S. States

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A Dissertation  
Submitted in Partial Fulfillment of the Requirements for the  
Doctorate of Philosophy

Department of Political Science  
Brown University  
May 2017

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This dissertation by Kelly Branham Smith is accepted in its present form  
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## **CURRICULUM VITAE**

Kelly Smith graduated *Summa cum Laude* from Providence College with a degree in Political Science. She received her Masters Degree in Political Science from Brown University in 2014. She co-authored a book chapter entitled “The Influence of Practice on Policy” with co-authors David K. Cohen and Susan L. Moffitt. She worked on numerous research projects including “Cultivating and Supporting Excellent Principals: Considerations for State Leadership and Policy,” a project funded by the Wallace Foundation and “The New Education Advocacy in the U.S. States: National Snapshot and a Case Study of Advance Illinois,” which was also funded by the Wallace Foundation. She received the P. Terrence Hopmann Award for Teaching Excellence for her work as a teaching assistant in American Presidency in Spring 2015.

## **ACKNOWLEDGMENTS**

Writing a dissertation is a long endeavor filled with many highs and lows. I could not have completed this long process without the help and support of so many people. At Brown University I depended on support, advice, and friendship from many of my fellow graduate students including Kaitlin Sidorsky, Matt Hodgetts, and Meghan Wilson. These colleagues and friends not only helped me through the dissertation, but also provided needed guidance throughout my graduate career. I am also indebted to all of the members of the Graduate American Politics Workshop group for reading multiple versions of my chapters and always providing insightful comments. Suzanne Brough and Patti Gardner were incredibly helpful during every stage of my dissertation writing and never failed to answer all of my many questions.

I am particularly indebted to my committee members: Susan L. Moffitt, Wendy Schiller, Paul Manna, and Kenneth Wong. Thank you for all of your helpful comments and advice along the way. I want to thank Wendy Schiller for mentoring me throughout my graduate education. I could not have progressed from coursework, through comprehensive examinations, my prospectus defense, and dissertation defense without your constant guidance and encouragement. You have always pushed me to be better. I also want to thank Susan Moffitt for all of the time she has dedicated to my career, this project, and me. You have gone above and beyond the job description of an advisor and have made me a better scholar because of it. I could not have asked for a better advisor.

I could never have completed this dissertation without the constant support from my family. To my parents, Jeff and Maureen Branham, who have supported me in all of my endeavors, I could not have done this without you. You were the first to teach me how to work

hard and persevere. To my siblings, Derrick, Jay, Connor, and Maggie, my nephew Trey, and my sister-in-laws, Danielle and Allie, for making me laugh throughout the dissertation writing process. I also am indebted to Connor for constantly making me consider the larger consequences of my work. When my dissertation work seemed dull or removed from the world, my conversations with Connor always kept me motivated to make this work relevant to the underserved children in this country.

I am eternally grateful to the constant, unwavering support and confidence of my husband, Kevin. This dissertation would not have been possible without you.

“Look after your work, doing it with enthusiasm, humility, competence, passion and with a spirit that knows how to thank the Lord.”- Pope Francis

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## INTRODUCTION

In all areas of policy, but particularly those that state governments are primarily responsible for, the United States has fifty state governments creating, adopting, and implementing a plethora of policies to address their states' problems. The ability of states to innovate and experiment with their own policies is why states are oftentimes called democratic laboratories. Thinking of states as democratic laboratories began in 1932 when Justice Brandeis wrote, "It is one of the happy incidents of the federal system that a single courageous State may, if its citizens choose, serve as a laboratory."<sup>1</sup>

States can operate as laboratories of democracy in two ways. First, elected officials can innovate within their state. These officials can invent and develop policy themselves to address important policy problems that the state faces. Second, states can learn from the policy experiments in other states. Elected officials can look to the policies in other states and use those policies to address similar issues within their states. In these two ways, elected officials are the primary actors in democratic laboratories and their actions complement democratic governance.

However, there is an enduring tension in the role of bureaucrats in state policymaking and democratic governance. Policymaking involves the creation, adoption, and implementation of policy. Therefore, state policymaking relies on elected officials adopting policies but relies on unelected officials to put policies into practice. In this process, democratic governance depends on the actions of unelected officials. Political scientists have sought to address this tension by exploring ways in which elected officials can force bureaucrats to comply with their policy decisions.<sup>2</sup> However, bureaucrats can be dynamic actors in the policymaking process and they

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<sup>1</sup> New York State Ice Co. v. Liebmann 285 U.S. 262 (1932).

<https://supreme.justia.com/cases/federal/us/285/262/case.html>, accessed March 17, 2015.

<sup>2</sup> For example Mathew D. McCubbins, Roger G. Noll, and Barry R. Weingast, "Administrative Procedures as Instruments of Political Control," *Journal of Law, Economics, & Organization* 3 (1987):

can influence the adoption of policy,<sup>3</sup> the implementation of policy,<sup>4</sup> and policy outcomes.<sup>5</sup> The ways in which bureaucrats are involved in democratic governance introduces tension into how, whether, and to what extent that governance is democratic.

This tension invites us to re-consider the label of ‘laboratories of democracy’ by rethinking the role of bureaucrats in policymaking at the state level. The actions of elected officials in policymaking support the label of laboratories of democracy, but it is unclear whether or how bureaucratic action in state policymaking supports or undermines that label. We need to examine new questions about the relationship between the bureaucracy and democratic governance at the state level. State bureaucracies may have different institutional structures, incentives for bureaucrats to learn, or different bureaucratic values than federal bureaucracies.<sup>6</sup> Levels of expertise, department budgets, and the implementing institutions may be different at the federal level than the state level as well as different across state bureaucracies.<sup>7</sup> All of these dynamics may render the role of bureaucrats in policymaking at the state level distinct from the role of bureaucrats in policymaking at the federal level. Questions remain such as what effects do bureaucrats and bureaucratic learning have on policymaking and democratic governance at the state level? Can bureaucrats and bureaucratic learning enhance democratic governance at the

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243-277. See also Brian J. Gerber, Cherie Maestas and Nelson C. Dometrius, “State Legislative Influence over Agency Rulemaking: The Utility of Ex Ante Review,” *State Politics and Policy Quarterly* 5 (2005): 24-46.

<sup>3</sup> Daniel Carpenter, *The Forging of Bureaucratic Autonomy: Reputations, Networks, and Policy Innovation in Executive Agencies, 1863-1928* (Princeton, NJ: Princeton University Press, 2001).

<sup>4</sup> Michael Lipsky, “Street-Level Bureaucracy and the Analysis of Urban Reform,” *Urban Affairs Quarterly* 6 (1971): 391-409

<sup>5</sup> See Susan Moffitt, *Making Policy Public: Participatory Bureaucracy in American Democracy*, (Cambridge University Press, 2014); Pamela J. Clouser McCann, “Agency Discretion and Public Health and Service Delivery,” *HSR: Health Services Research* 44(2009): 1897- 1908; Kenneth J. Meier and Laurence J. O’ Toole Jr. *Bureaucracy in a Democratic State: A Governance Perspective* (Baltimore, MD: The Johns Hopkins University Press. 2006).

<sup>6</sup> Meir and O’Toole, 2006.

<sup>7</sup> Please see Meier and O’Toole (2006) for a discussion of implementing institutions and the many forms they may take.

state level? If so, under what conditions will this occur? These questions are particularly relevant as state bureaucracies become more professionalized which can lead to an increase in bureaucratic involvement in policymaking.<sup>8</sup>

Although bureaucrats may pursue their organizational interests, there are ways in which bureaucrats can enhance democratic governance.<sup>9</sup> Bureaucrats can learn.<sup>10</sup> Bureaucratic learning can improve democratic governance when it supports the preferences of elected officials.<sup>11</sup> It also supports democratic governance when it gives bureaucrats tools to achieve the policy's goals established by elected officials. One way bureaucrats may engage in learning is by participating in policy learning. Policy learning is when "policymakers learn from others' experiments and adapt policies to meet certain circumstances at home."<sup>12</sup> Policy learning contributes to democratic governance because it ideally helps elected officials adopt appropriate

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<sup>8</sup> Graeme T. Boushey and Robert J. McGrath, "Experts, Amateurs, and Bureaucratic Influence in the American States," *Journal of Public Administration and Theory* 27 (2017): 85-103. Please note that some state bureaucrats may be elected. See *Book of States* from the Council of State Governments citations in the bibliography for further information. For more information on how elected local officials can affect policy outcomes see Michael Sances, "The Distributional Impact of Greater Responsiveness: Evidence From New York Towns," *Journal of Politics* 78 (2016): 105-119.

<sup>9</sup> For examples of bureaucrats supporting democratic governance please see Moffitt, 2014 and Sean Gailmard and John W. Patty, *Learning While Governing: Expertise and Accountability in the Executive Branch*, (Chicago, IL: Chicago University Press, 2013). Bureaucrats do not necessarily enhance democratic governance, as they are able to pursue other goals (such as organizational interest) as well. For example, agencies may restrict participation opportunities for political reasons. Please see Rachel Augustine Potter, "Disabling the Alarm? The Politics of Participation in Rulemaking," working paper. Bureaucrats may also manipulate the timing of the rulemaking process for political reasons. Please see Rachel Augustine Potter, "Slow-Rolling, Fast-Tracking, and the Pace of Bureaucratic Decisions in Rulemaking," Forthcoming in the *Journal of Politics* (2017). Bureaucrats can also undermine democratic governance by determining access to policies and voting information. For examples please see Ariel R. White, Noah L. Nathan and Julie K. Faller, "What Do I Need to Vote? Bureaucratic Decision and Discrimination by Local Election Officials," *American Political Science Review* 109 (2015): 129-142, 131. For bureaucratic discretion also see Lonna Rae Atkeson, Yann P. Kerevel, Michael R. Alvarez, and Thad E. Hall, "Who Asks for Voter Identification? Explaining Poll-Worker Discretion," *The Journal of Politics* 76 (2014): 944-957.

<sup>10</sup> Carpenter, 2001. Bureaucrats at the county level can also learn from policy experiments in other counties. See Lawrence M. Mead, *Government Matters: Welfare Reform in Wisconsin*, (Princeton: Princeton University Press, 2004).

<sup>11</sup> Gailmard and Patty, 2013.

<sup>12</sup> Charles R. Shipan and Craig Volden, "When the Smoke Clears: Expertise, Learning and Policy Diffusion," *Journal of Public Policy* 34 (2014): 357-287.

policies for their constituents. State-level bureaucrats may learn from the policy experiments in forty-nine other state departments. This bureaucratic learning may support democratic governance if bureaucrats choose to use that learning to achieve a policy's goal. Just as policy learning among elected officials strengthens democratic governance, bureaucratic learning across states can contribute to democratic governance by helping unelected officials implement the peoples' policies.

Another way that bureaucrats may enhance democratic governance is by using their expertise to improve the policy learning of elected officials.<sup>13</sup> Bureaucrats can become experts in their policy areas and they gather information.<sup>14</sup> Bureaucrats can be a valuable resource for state legislators when they need information on policy innovations. Bureaucrats may learn both from within their departments and from other bureaucrats across states. Bureaucrats can participate in the policy learning of elected officials by providing the policy information used in policy learning. By providing relevant information, bureaucrats influence the policy adoption decisions of elected officials. This is not necessarily in contradiction to democratic governance because learning across states enhances democratic governance. In this way, bureaucrats and bureaucratic learning can enhance democratic governance by being better able to achieve the goals of a policy and by providing information for legislators to make appropriate policy decisions for the state.

### Diffusion

I assess the role of bureaucrats and bureaucratic learning in democratic governance by focusing on the adoption and implementation of diffusing policies. States act as democratic

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<sup>13</sup> In this dissertation I assume bureaucrats' and elected officials' preferences are aligned. In this way, bureaucrats will use their learning to implement the policies elected officials adopted. Future research should assess how bureaucratic learning can influence adoption and implementation when their preferences are not aligned.

<sup>14</sup> Francis E. Rourke, *Bureaucracy, Politics, and Public Policy*, (Brown Little, 1984).

laboratories by creating their own policies or learning from other states' policy innovations and adopting them as their own. The time and resources it takes to create a policy from scratch can be prohibitive. However, because forty-nine other governments across the country can face similar policy problems, state officials can learn from how other states are experimenting and adapt those policy experiments to address their states' unique concerns. The process by which states act as democratic laboratories as policies spread from government to government is called policy diffusion.<sup>15</sup>

Political scientists have focused on elected officials' role in policy diffusion because they measure the spread of policy from one government to another based upon which states have adopted the policy. This has allowed us to understand why so many states would adopt certain smoking laws or state lotteries.<sup>16</sup> However, the central focus on policy adoption has ignored how states implement diffusing policies differently. With different legislative capacity, bureaucrats, resources, geographic layouts, and constituency characteristics, states should face different dynamics as they implement policies within their borders.

Top diffusion scholars have begun to call for a greater attention to implementation in diffusion studies. In 2012, Charles Shipan and Craig Volden noted, "the process does not end at adoption-rather, policies evolve through their implementation. Indeed, implementation may present some of the most important opportunities for learning and imitation over time and across governments. Extending the policy diffusion literature beyond initial policy adoptions is

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<sup>15</sup> Shipan and Volden (2008) define diffusion as "the spread of innovations from one government to another." Charles Shipan and Craig Volden, "The Mechanisms of Policy Diffusion," *American Journal of Political Science* 52 (2008): 840-857.

<sup>16</sup> Charles R. Shipan and Craig Volden, "When the Smoke Clears: Expertise, Learning and Policy Diffusion," *Journal of Public Policy* 34 (2014): 357-287; Frances Stokes Berry and William D. Berry, "State Lottery Adoptions as Policy Innovations: An Event History Analysis," *American Political Science Review* 84 (1990): 395-415.

warranted and long overdue.”<sup>17</sup> The call for studying implementation, however, continues to place implementation as secondary to or as following adoption. It focuses on studying how policies evolve during implementation and how elected officials might learn or imitate states. Extending diffusion beyond policy adoption also means assessing how implementation bears on states’ adoption decisions and, thus, the very pattern of diffusion.

The implementation of the same policies will be different across states and these differences will bear on how and whether the policy continues to spread across state governments. When states transition from policy adoption to policy implementation, they face new electoral, financial, and capacity constraints.<sup>18</sup> As states try to spread a policy within its borders, this produces more information for neighboring state officials to learn from as they consider adopting the policy innovation themselves. Therefore, implementation is a fundamental part of the diffusion process and democratic governance.

Other unelected state officials, rather than elected officials, can influence democratic governance through policy adoption and implementation. When we transition to incorporating implementation into diffusion, we also transition from considering the role of elected officials to considering the role of bureaucrats. Assessing how states implement policies differently and how those differences bear on how policies spread requires that we study the role of bureaucrats in this process. Bureaucrats do not serve two-year terms nor do they run for re-election like elected officials. Instead, bureaucrats may work within a department or on a policy issue for many years. Therefore, bureaucrats may have opportunities to learn and influence

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<sup>17</sup> Charles Shipan and Craig Volden, “Policy Diffusion: Seven Lessons for Scholars and Practitioners,” *Public Administration Review* 72 (2012): 793.

<sup>18</sup> As Cohen and Moffitt (2006) argue “the capability to make something constructive out of policies and programs is not fixed. It expresses a relationship between the aims of the intervention, on the one hand, and the human, social, and fiscal resources that are available to achieve those aims on the other.” David Cohen and Susan Moffitt, *The Ordeal of Equality: Did Federal Regulation Fix the Schools?* (Cambridge, MA: Harvard University Press, 2006), pg. 15.

implementation over a long period of time. Bureaucrats are critical actors in the process of diffusion because they participate in policy learning and use this learning to change the implementation and adoption of policy within their state.

The goal of this dissertation is to assess how and whether bureaucrats and bureaucratic learning influence democratic governance in and across states. I do this by explaining how implementation differences structure the spread of policy from one government to another and evaluating the role of unelected officials in this process. This dissertation is guided by two questions. First, do states implement the same policies differently and, if so, how do those differences bear on subsequent adoptions? Second, how are bureaucrats participating in this process? These two research questions lie at the heart of a larger puzzle: If bureaucrats are driving diffusion and diffusion is the primary way in which states act as democratic laboratories, are our states operating as democratic laboratories? If they are bureaucratic laboratories, in what ways could this strengthen or weaken democratic governance?

### Preview of the Guiding Theoretical Framework

The guiding theory behind this dissertation is that out-of-state politics, including bureaucratic politics, matters for the policymaking process within states and influences democratic governance. I argue that out-of-state adoption bears on policy implementation and that out-of-state implementation bears on policy adoption. In this way, the implementation of policy is fundamental to the process of diffusion. Conceptualizing diffusion in this way changes the set of actors we think are critical to the spread of policies. Instead of focusing exclusively on the role of elected officials, I examine how bureaucrats participate in learning during diffusion.

### *How Implementation Politics Can Structure Diffusion*

Implementation structures the spread of policy across governments in two ways. First, internal implementation politics will bear on adoption. Adopting state-created, state-spreading policy is risky because the federal government does not necessarily provide assistance during implementation. States are a primary implementing authority of these policies. Internal implementation politics and capacities will matter for whether state officials consider the adoption of a state-created policy. Second, out-of-state implementation politics will bear on adoption. The main mechanism of diffusion is policy learning. This assumes elected officials in one state learn about Policy A from the adoption of Policy A in another state and adopt Policy A for its state. Out-of-state implementation can provide critical information to states as they learn both about the existence of policy and how a policy is put into practice.

### *How Policy Learning Can Influence Implementation*

The implementation literature has examined policy implementation within a single state or the implementation of federal policies across states, but it has not utilized diffusion to assess how states implement the same, state-adopted policies differently.<sup>19</sup> In doing so, it has not considered how out-of-state politics can bear on implementation within a state. I argue this occurs through the primary mechanism in diffusion: policy learning. Just as policy learning occurs when states adopt policies, states are also going to learn from the adoption of policy in other states as they implement similar policies. States are one primary implementing authority of their policy experiments and will continue to try to learn from others as they implement policies. Policy learning is not constrained to occurring during a single stage of the policy process.

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<sup>19</sup> For examples see Pressman, J.L. and Wildavsky, A. *Implementation*. (Berkeley and Los Angeles, CA: University of California Press, 1984) and Malcolm L. Goggin, Ann O'M. Bowman, James P. Lester, Laurence J. O'Toole, Jr., *Implementation Theory and Practice: Toward a Third Generation* (Scott, Foresman/Little, Brown Higher Education: Glenview, IL. 1990),

### *The Role of Bureaucrats*

Bureaucrats are critical actors in this process. Bureaucrats at the federal level can learn from within their department, innovate within their department, and influence policy adoption.<sup>20</sup> With the lens of diffusion, state-level bureaucrats can also learn and innovate within their departments. State-level education bureaucrats may also learn from the forty-nine other education departments across the country, the federal government, and from local governments.<sup>21</sup> During implementation they will learn from other states and apply those lessons to influence implementation within their state. Bureaucrats also develop bureaucratic expertise in their policy area.<sup>22</sup> During adoption, they are policy experts and provide information of other states' policy experiments to elected officials in their state. In these ways, bureaucrats participate in bureaucratic learning and they use this learning to influence both the adoption and implementation of diffusing policies.

### *Policy Reach*

In this dissertation I conceptualize implementation as policy reach, which I define as how and whether the state spreads a policy within its borders. When I discuss implementation, I refer to the states' actions to extend a policy's reach. After the state adopts a policy with a particular goal or set of goals, the state may then extend the reach of the policy in the state. For example, a state may adopt a policy with a goal to provide a service to families living below the poverty line. After the policy is adopted, state actors may extend the reach of the policy by providing that service to families living below the poverty line. A possible measure of policy reach for this policy would be the number or percentage of families living below the poverty line who were

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<sup>20</sup> Carpenter, 2001.

<sup>21</sup> Lawrence M. Mead, *Government Matters: Welfare Reform in Wisconsin*, (Princeton: Princeton University Press, 2004).

<sup>22</sup> Rourke, 1984.

provided the service-the goal of the policy. Extending a policy's reach involves elected officials, unelected officials, interest groups, and citizens as they all engage in this process. The diffusion of policy across states matters, but the diffusion of policy within a state matters as well.

### Pre-kindergarten Education

In this dissertation I use state pre-kindergarten policies to assess how implementation bears on adoption and how bureaucrats are driving the process. Education policy is an appropriate policy area to answer questions of state government and policy. Education is a policy area that falls largely under the purview of state governments. Therefore, there are many opportunities for states to innovate and participate in the diffusion of education policies. States have space to act as laboratories in numerous policy areas. However, using policy areas where states have significant authority allows for variation across states and policies to assess my argument.

### *Brief History of Pre-kindergarten Policies*

A state pre-kindergarten program exists when a state funds an initiative to provide early education to four-year-olds.<sup>23</sup> It is considered separate from childcare because of the educational component of the program. States became the center of early education policy after President Richard Nixon (1969-1974) vetoed the Comprehensive Child Development Act.<sup>24</sup> After the veto, activists turned to states to accomplish their policy goals. In Andrew Karch's (2013) book on preschool politics, he argues "by succeeding in multiple venues, preschool advocates

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<sup>23</sup> Please see the National Institute for Early Education Research for a more complete definition for state preschool programs. W. Steven Barnett, Megan E. Carolan, James H. Squires and Kristy Clarke Brown, "The State of Preschool 2014: State Preschool Yearbook," The National Institute for Early Education Research, 2014, <http://nieer.org/yearbook>, accessed February 2, 2017, pg. 19.

<sup>24</sup> Andrew Karch, *Early Start: Preschool Politics in the United States*, (Ann Arbor, MI: University of Michigan Press, 2014)

established the foundation for the fragmentation of the contemporary system.”<sup>25</sup> This fragmentation influenced states as they tried to expand their programs.<sup>26</sup>

Pre-kindergarten advocates have made many arguments for expanding pre-k education. As Karch describes “the related emphasis on ‘school readiness’ increased the prominence of the economic rationale for investing in early childhood initiatives.”<sup>27</sup> Arguments for investing in early childhood education are usually based on the Perry/High Scope study from the 1960s and the Abecedarian study conducted from 1972 to 1985. These two studies show that participating in pre-kindergarten led to long-term benefits on a host of important factors.<sup>28</sup> Chart 1.1 from the Center for Education Progress shows some of the findings of the Perry High Scope Project study.

The Perry High Scope Project study compares the well being of two groups of children from when they were pre-kindergarten age into adulthood. One group was assigned to participate in a preschool program (the treatment group) whereas the other group did not participate in a preschool program (the control group).<sup>29</sup> The study demonstrates that participants in pre-kindergarten were more likely to graduate high school and had higher earnings over time. Participants were less likely to smoke and more likely to own a home.<sup>30</sup> More recently, however, the findings of these studies have been disputed. Researchers at Vanderbilt University conducted a study of Tennessee’s pre-k program and their findings show

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<sup>25</sup> Ibid, pg. 9.

<sup>26</sup> Ibid, pg.187.

<sup>27</sup> Karch, 2014, pg. 157.

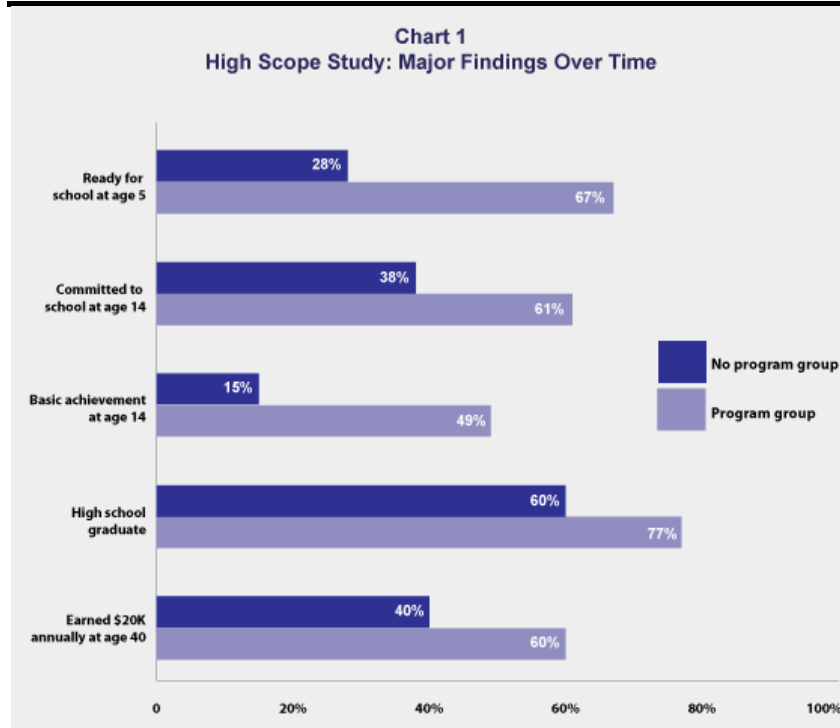
<sup>28</sup> Eileen O’Brien and Chuck Dervarics, “Pre-kindergarten: What the Research Shows,” Center for Public Education, March 2007, <http://www.centerforpubliceducation.org/Main-Menu/Pre-kindergarten/Pre-Kindergarten/Pre-kindergarten-What-the-research-shows.html>, accessed February 2, 2017.

<sup>29</sup> O’Brien and Dervarics, March 2007.

<sup>30</sup> Karen Schulman, “Overlooked Benefits of Prekindergarten,” National Institute for Early Education, March 2005, <http://nieer-www1.rutgers.edu/resources/policyreports/report6.pdf>, accessed February 3, 2017.

the benefits from pre-k largely disappeared by the third grade.<sup>31</sup> As states invest in this area of policy, there has been conflicting research on the long-term gains associated with a pre-kindergarten education.

Chart 1.1: Perry High Scope Project Findings



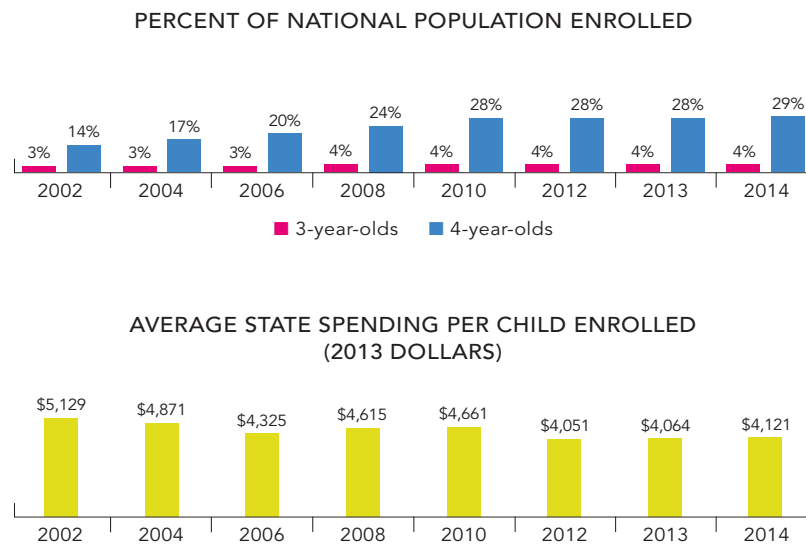
Source: Eileen O’Brien and Chuck Dervarics, “Pre-kindergarten: What the Research Shows,” Center for Public Education, March 2007, <http://www.centerforpubliceducation.org/Main-Menu/Pre-kindergarten/Pre-Kindergarten/Pre-kindergarten-What-the-research-shows.html>, accessed February 2, 2017.

State pre-kindergarten policy is an appropriate case study because states have been innovating in this space for decades and have been the primary policymakers. In the 2013-2014 school year, states spent a total of about 5.55 billion dollars on pre-kindergarten education. Among all ages, a total of 1,347,072 children across the United States were enrolled in state

<sup>31</sup> See Mark W. Lipsey, Dale C. Farran, and Kerry G. Hofer, “A Randomized Control Trial of a Statewide Voluntary Prekindergarten Program on Children’s Skills and Behaviors Through the Third Grade,” Peabody Research Institute, September 2015, [https://my.vanderbilt.edu/tnprekevaluation/files/2013/10/VPKthrough3rd\\_final\\_withcover.pdf](https://my.vanderbilt.edu/tnprekevaluation/files/2013/10/VPKthrough3rd_final_withcover.pdf), accessed January 31, 2017.

programs in the 2013-2014 school year.<sup>32</sup> Participation in pre-kindergarten has increased since 1991 across different ethnicities.<sup>33</sup> Graph 1.1 from the National Institute of Early Education Research provides a small snapshot into some elements of pre-k policy in the U.S. states.<sup>34</sup>

Graph 1.1: National Snapshot of Pre-k Policy



Source: Barnett, W. Steven, Megan E. Carolan, James H. Squires, and Kristy Clarke Brown, *The State of Preschool 2014: State Preschool Yearbook*, New Brunswick: National Institute for Early Education Research, 2015.

*Universal* pre-kindergarten is a policy that allows for any and all four-year-olds in the state to participate in an early education program the year prior to entering kindergarten. The way in which universal pre-kindergarten was developed within states and spread across states makes it a pertinent policy to assess the diffusion and implementation of state-created, state-adopted policy. This policy began in 1995 when Governor Zell Miller of Georgia declared Georgia's targeted pre-k program, funded by the new state lottery, to be open to any and all four-

<sup>32</sup> Barnett et al, 2014.

<sup>33</sup> W. Steven Barnett and Yarosz, Donald J., "Who Goes to Preschool and Why does it Matter," National Institute for Early Education Research Policy in Brief, November 2007.

<sup>34</sup> The data in this paragraph is from Barnett et al, 2014.

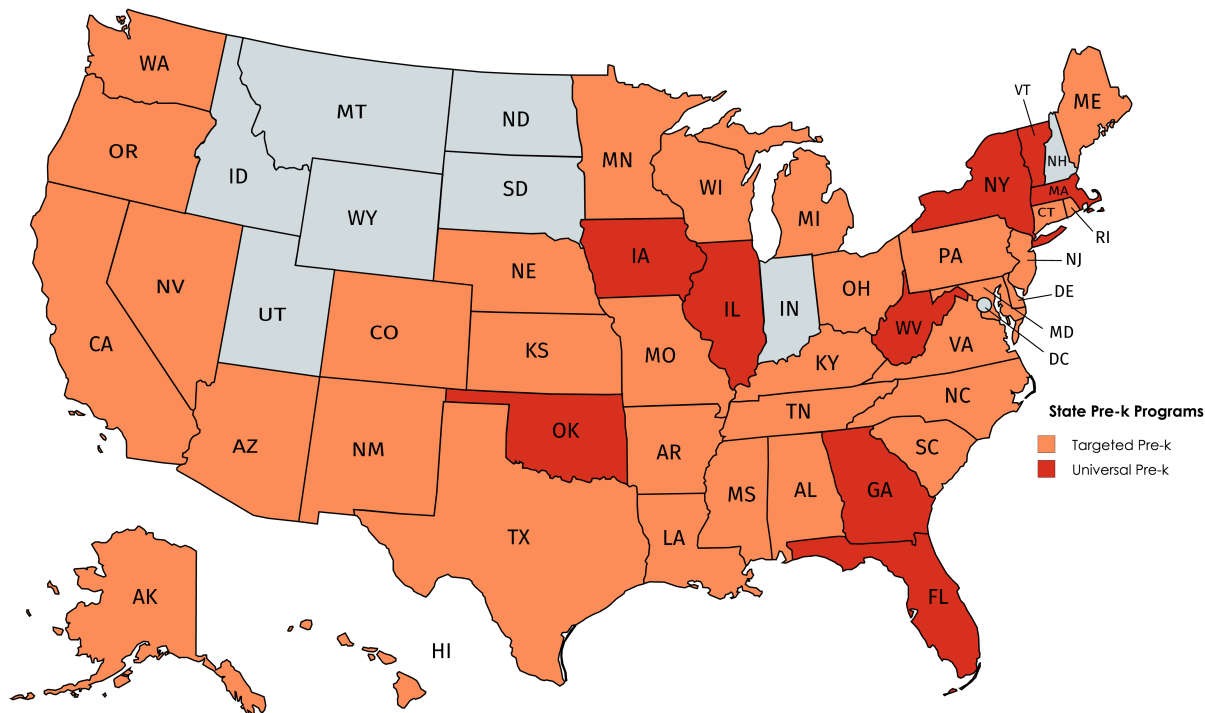
year-old residents who wished to participate.<sup>35</sup> A universal pre-k program is distinct from a targeted program because it does not have eligibility requirements for individuals to participate. After Georgia created and adopted universal pre-kindergarten, New York and Oklahoma soon followed in 1997 and 1998, respectively. There was a four-year lull without any universal pre-kindergarten adoptions, but both Florida and West Virginia adopted universal pre-kindergarten in 2002. In 2005, Massachusetts adopted universal pre-kindergarten. Universal pre-kindergarten extended to the Midwest when Illinois adopted universal pre-k in 2006 and Iowa adopted the policy in 2007. Most recently, Vermont adopted universal pre-k in 2014.<sup>36</sup> Graph 1.2 demonstrates the current state of pre-k policies in the United States.

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<sup>35</sup> Anthony Radon, “Universal Prekindergarten in Georgia: A Case Study of Georgia’s Lottery Funded Pre-k Program,” Foundation for Child Development, 1999, <http://fcd-us.org/sites/default/files/Universal%20PreK%20in%20Georgia.pdf> (accessed February 29, 2016).

<sup>36</sup> “New York Takes a Fresh Look at Universal Pre-k,” National Institute for Early Education Research, <http://nieer-www1.rutgers.edu/publications/new-york-takes-fresh-look-universal-pre-k>, accessed February 5, 2017; W. Steven Barnett, Megan E. Carolan, James H. Squires and Kristy Clarke Brown, “The State of Preschool 2014: State Preschool Yearbook,” The National Institute for Early Education Research, 2014, <http://nieer.org/yearbook>, accessed February 2, 2017.

Graph 1.2: State Pre-k Policies in 2014



Created with mapchart.net ©

Source: Author's map created with data from Barnett, W. Steven, Megan E. Carolan, James H. Squires, and Kristy Clarke Brown, *The State of Preschool 2014: State Preschool Yearbook*, New Brunswick: National Institute for Early Education Research, 2015.

Universal pre-kindergarten is an appropriate, but tough policy area to assess the way in which implementation and bureaucrats structure policy diffusion. It is appropriate because this is a policy area in which states have authority and have been exercising their authority by innovating and adopting new policies. It is also difficult because a universal policy has a clear potential policy reach, which is to educate as many four-year-old residents who want to participate in a pre-kindergarten education. With a clear potential reach of the policy, implementation differences should be less likely. Establishing that states extend the reach of policies differently and that those differences shape the pattern of diffusion is more difficult with a policy that has a clear reach.

Early childhood education is also a difficult policy area to assess whether states are laboratories of bureaucracy and, therefore, an appropriate policy focus of the dissertation. Although early education bureaucrats are in the realm of education policy, they are not the primary education bureaucrats because the K-12 system is larger and more comprehensive. State K-12 systems have been operating for much longer than the state pre-kindergarten programs established in the 1980s, 1990s, 2000s, and 2010s. Furthermore, bureaucrats involved in pre-kindergarten policy span different state departments. Oftentimes, state departments of education and state departments of health and human services are involved in early education policies. This makes for a more complex and fragmented space for early education bureaucrats to gather information. Therefore, early education policy is a challenging case to establish bureaucratic learning.

### Methodological Approach

I constructed an original dataset by collecting state level political, bureaucratic, and policy variables for each state and year over the course of twenty years. Collecting state level data over time is necessary to assess the pattern and pace of policy diffusion as well as policy implementation. In order to assess both the diffusion and implementation of state policies, I divided the dataset into two separate datasets. One dataset is used to model the diffusion of universal pre-kindergarten and includes data for all fifty states from 1995 to 2014. The year 1995 is the most appropriate starting point of data collection as this was the first year universal pre-kindergarten was created and adopted by a state. The second dataset is used to model the implementation of state pre-kindergarten policies. This dataset consists of all fifty states from 2001 to 2013. The dependent variable in this dataset is the percentage of four-year-old residents in a state who are enrolled in the state's pre-kindergarten program. Data on pre-kindergarten

enrollment in state pre-kindergarten programs began to be collected by the National Institute for Early Childhood Education for the 2001-2002 school year.

Data collection began in the spring of 2015 and continued into the fall of 2016. I gathered data for each state and each year over the span of twenty years. I collected data from sources such as the United States Census, the Book of States, the National Center for Education Statistics, as well as other sources. A full description of each variable and how it was collected can be found in Appendix D.

In addition to my large quantitative analysis, I conducted sixteen semi-structured interviews and six follow-up interviews of legislators and bureaucrats in four states. I contacted members of the education committee in state legislatures, bureaucrats working in early childhood education, members of a Governor's policy office/team as well as leaders in the state teachers' unions. I interviewed four respondents from Massachusetts, four respondents from Tennessee, five respondents from Georgia, and three respondents from New Jersey. Each interview lasted twenty to thirty minutes. The interviews took place in July, August, and September of 2016. The follow-up interviews lasted between ten and twenty minutes and were conducted in January, February, and March of 2017. Due to the low response rate to my interview requests, I use the interview data for illustrative purposes rather than drawing broad conclusions from the data. A full description of the interview questions and methods can be found in Appendix E.

### Plan for the Dissertation

This dissertation assesses the extent to which states are acting as laboratories of bureaucracy and how this supports and/or limits democratic governance. By focusing on a discrete moment in time-the moment of adoption-diffusion scholars have been pre-occupied with understanding how elected officials operate in this process. When we consider how other parts

of the policy process bear on how policies spread, it changes the set of actors involved in the process. This dissertation takes seriously how unelected officials are structuring policymaking within and across states.

In Chapter 1, I present my full theoretical framework for how I expect bureaucrats participate in democratic governance during policy diffusion. Although the argument has been previewed in this chapter, I argue that states use the information generated from other states' implementation of policy in their policy adoption decisions. The main mechanism by which this occurs is through the mechanism of policy learning. However, whereas the diffusion literature considers elected officials as the participants in policy learning, I discuss why bureaucrats will learn across state lines and use that learning to influence both policy adoption and implementation in their state.

I begin to apply my theoretical framework to the policy of universal pre-kindergarten in Chapter 2. In this chapter, I describe the development and spread of universal pre-kindergarten more comprehensively. I also take a close look at the politics surrounding pre-k adoption in three states. These cases and the quantitative analysis in the chapter shed light on why bureaucrats and bureaucratic dynamics are key explanations for why states adopt diffusing policies.

In Chapter 3 I establish that states implement policies differently and I assess how out-of-state, bureaucratic, and electoral politics determine those differences. Policy learning, a main mechanism in diffusion, operates in implementation as well. In this way, out-of-state politics bears on policy implementation within states. I also show how bureaucrats learn across states in establishing early learning standards and how this bears on policy reach.

In Chapter 4 I demonstrate how the implementation of diffusing policies changes the pattern of diffusion itself. When states are considering adopting a state-created policy they draw lessons from the adoption of policy as well as its implementation. Implementation is a critical part of the diffusion process because it determines which states adopt policies and, therefore, how the policy spreads. It is also important to democratic governance because implementation provides the information state officials need to make well-informed adoption decisions.

I conclude the dissertation by discussing the possible democratic implications of states operating as laboratories of bureaucracy. Although the role of unelected officials in state policymaking decisions may seem contrary to a majoritarian elected democracy, bureaucrats can leverage their expertise to influence implementation in a way that achieves policy goals. Bureaucrats can also use their expertise to provide information to elected officials, thus shaping their policy learning. In structuring the pattern of diffusion, bureaucrats can set aside self-interest and may enhance democratic governance in states. Future research should continue to assess the ways in which and the conditions under which states acting as laboratories of bureaucracy support or inhibit democracy.

## CHAPTER 1: LABORATORIES OF BUREAUCRACY

### Introduction

In the 1932 Justice Brandeis wrote “It is one of the happy incidents of the federal system that a single courageous State may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country.”<sup>37</sup> Since then, political scientists have generated a scholarship devoted to understanding when, how, and why states serve as democratic laboratories. The policy diffusion literature was developed out of understanding how policy experiments in one state spread to other states. The literature has overwhelmingly studied a discrete moment in time, the moment of adoption. In doing so, scholars have overlooked whether and how other parts of the policy process enhance and/or limit democratic governance.

The policy process is much more comprehensive than policy adoption. It also includes implementation as well as other stages of the policy process. Because scholars of diffusion have focused on the moment of adoption, they have largely overlooked how implementation politics can bear on adoption and how adoption can bear on implementation. In doing so, we have omitted the role of bureaucrats in the diffusion process. Bureaucratic learning is a primary mechanism that drives diffusion. Introducing bureaucrats into the state policymaking process raises new questions about whether and how states are acting as democratic laboratories. Bureaucrats and bureaucratic learning may enhance democratic governance by helping bureaucrats achieve policy goals and by ensuring elected officials have the most appropriate policy information.

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<sup>37</sup> New York State Ice Co. v. Liebmann 285 U.S. 262 (1932).  
<https://supreme.justia.com/cases/federal/us/285/262/case.html> (accessed March 17, 2015).

In this chapter, I draw from the diffusion, implementation, and bureaucracy literatures to demonstrate how bureaucratic and bureaucratic learning can shape the state policymaking process. I do this by developing a theory for why and how implementation is part of the diffusion process. Considering policy diffusion in this way has important implications for unelected officials influencing policy in a democracy. Bureaucrats are important actors in the way adoption bears on implementation because they learn from the policies other states adopt and apply that learning to policy implementation. Implementation bears on the adoption of diffusing policies because it is an important source of information for policy learning. States are operating as laboratories of bureaucracy. However, laboratories of bureaucracy can enhance democratic governance when it supports policy implementation and policy learning.

#### *Laboratories of Bureaucracy*

Implementation is an important part of the policy process for states to consider during diffusion because states are choosing to adopt state-created policies. States choose to adopt these policies and they are responsible for implementing these policies. States are an important implementing authority for the policies they adopt.<sup>38</sup> Therefore, both the internal potential of implementing the diffusing policy as well as other states' implementation experiences may be a critical consideration when adopting state-created policies.

One of the primary mechanisms of policy diffusion is policy learning. This is a process whereby officials in one state learn about a policy in another state and adopt that policy in their own state. Policy learning is more than learning about the existence of a policy. Instead, with officials being responsible for the adoption and implementation of state-created policies, they may also want to learn about the state's implementation of the policy. Therefore, the way states

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<sup>38</sup> For a discussion of implementing institutions and their forms, please see Kenneth J. Meier and Laurence J. O' Toole Jr. *Bureaucracy in a Democratic State: A Governance Perspective* (Baltimore, MD: The Johns Hopkins University Press. 2006).

implement diffusing policies may have consequences for subsequent adoptions because it affects what other state officials learn. By studying the moment of adoption, scholarship has failed to examine how states implement the same policies differently and how this, in turn, affects diffusion.

Incorporating implementation into the study of diffusion makes two important contributions to the field. First, this argument contributes to our understanding of implementation. The implementation literature has focused on state implementation of federal policy or the implementation of policy within a singular state. In considering implementation differences of the same policy across states, this study introduces subnational variation into the study of implementation. This variation has yet to be explored and this work opens the door for future research to leverage subnational variation to assess theories of implementation. It also pushes us to think about how, when, and under what conditions the dynamics of putting policy into practice in one area may have effects on putting the same policy into practice in other areas.

Second, incorporating implementation into the study of diffusion highlights the role of different actors. Bureaucrats have been a primary focus of implementation scholarship<sup>39</sup> and elected policymakers have been a primary focus of policy diffusion scholarship.<sup>40</sup> By bringing implementation into the study of diffusion, I reconsider the role of unelected officials in this

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<sup>39</sup> For examples please see Ariel R. White, Noah L. Nathan, and Julie K. Faller, "What Do I Need to Vote? Bureaucratic Decision and Discrimination by Local Election Officials," *American Political Science Review* 109 (2015): 129-142; Lonna Rae Atkeson, Yann P. Kerevel, Michael R. Alvarez, and Thad E. Hall, "Who Asks for Voter Identification? Explaining Poll-Worker Discretion," *The Journal of Politics* 76 (2014): 944-957; Michael Lipsky, "Street-Level Bureaucracy and the Analysis of Urban Reform," *Urban Affairs Quarterly* 6 (1971): 391-409; Michael Lipsky, *Street-Level Bureaucracy: Dilemmas of the Individual in Public Services*, (Russell Sage Foundation: New York, 1980).

<sup>40</sup> For examples please see Frances Stokes Berry and William D. Berry, "State Lottery Adoptions as Policy Innovations: An Event History Analysis," *American Political Science Review* 84 (1990): 395-415; Charles Shipan and Craig Volden, "Bottom-Up Federalism: The Diffusion of Antismoking Policies from U.S. Cities to States," *American Journal of Political Science* 50 (2006): 825-843; Charles R. Shipan and Craig Volden, "When the Smoke Clears: Expertise, Learning and Policy Diffusion," *Journal of Public Policy* 34 (2014): 357-287.

process. I theorize that bureaucrats are important actors because they may participate in policy learning during the diffusion process. They may use their expertise to gather information on other states' policies and provide this information to elected officials.

The bureaucracy literature asserts that bureaucrats can gather information, learn from their own policy experiments, and change implementation from this learning. However, this literature has not exploited bureaucratic action at the state level. As bureaucrats at the federal level learn from policy experiments within their own departments and state departments, state level bureaucrats may also learn from their own policy experiments as well as the policy experiments conducted by similar departments across states. State-level bureaucrats may differ from federal-level bureaucrats because of different institutional structures, different levels of expertise, different incentives, or because states may share similar implementation environments.<sup>41</sup> After learning about policy experiments in other states, bureaucrats can change the implementation of policies within their state or can affect the adoption of policy within their state. In this way, politics surrounding implementation and adoption in other states (out-of-state politics) bears on both the adoption and implementation of policy within states.

### Diffusion

Policy diffusion is “the spread of innovations from one government to another.”<sup>42</sup> The four main mechanisms of this process are competition, learning, coercion, and socialization.<sup>43</sup> Jack Walker (1969) pioneered the study of policy diffusion by arguing that the mechanisms of emulation and competition explain why policies diffused in regional patterns. He finds that

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<sup>41</sup> Please see Nicholson-Crotty and Carley (2016) for a discussion of similar implementation environments across states. Sean C. Nicholson-Crotty and Sanya Carley, “Effectiveness, Implementation, and Policy Diffusion,” *State Politics & Policy Quarterly* 16, no. 1 (2016): 78-97.

<sup>42</sup> Charles Shipan and Craig Volden, “The Mechanisms of Policy Diffusion,” *American Journal of Political Science* 52 (2008): 840-857.

<sup>43</sup> Erin R. Graham, Charles R. Shipan and Craig Volden, “The Diffusion of Policy Diffusion Research in Political Science,” *British Journal of Political Science* 43 (2013): 673-701, pg. 690

states share both geographic borders and a “specialized set of communication channels through which flow new ideas, information and policy cues.”<sup>44</sup> Virginia Gray (1973) disagrees with Walker’s aggregation of policies and argues that states are more or less innovative depending upon the type of law and the level of federal involvement in the diffusion process.<sup>45</sup> Diffusion scholars have not only studied the spread of policies across states but also how diffusion can occur between different levels of government.<sup>46</sup>

Overall, the literature on policy diffusion focuses on the role of state characteristics, elected officials, and interest groups in explaining whether states adopt diffusing policies. However, by focusing on a discrete moment in time, diffusion scholars overlook how implementation and bureaucrats can influence the effect of out-of-state politics on adoption and implementation. In doing so, diffusion scholars have minimized the role of bureaucrats in the adoption and implementation of diffusing policies. Considering the role of bureaucrats in diffusion invites us to consider how, when, and whether bureaucrats and out-of-state politics influence state policymaking.

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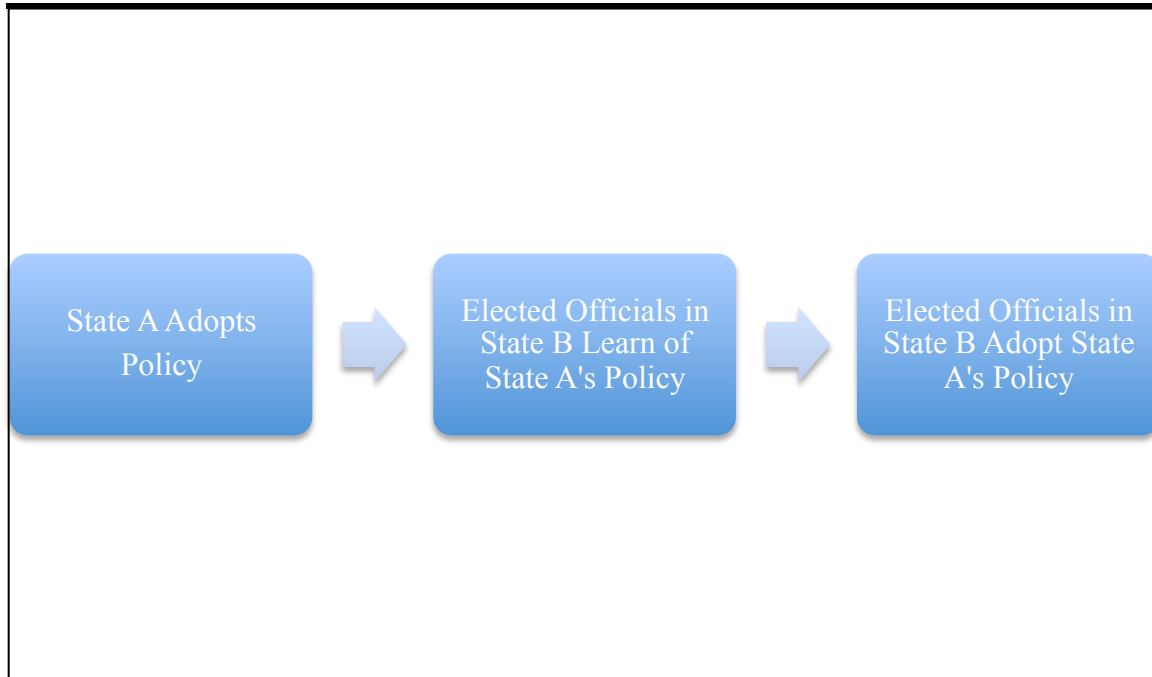
<sup>44</sup> Walker, 1969, pg. 63.

<sup>45</sup> Virginia Gray, “Innovation in the States: A Diffusion Study,” *The American Political Science Review* 67 (1973): 1174-1185. State competition, however, is not always beneficial in its outcome, as scholars have concerned themselves with how state competition can result in a race to the bottom. See Michael A. Bailey and Mark Carl Rom, “A Wider Race? Interstate Competition across Health and Welfare Programs,” *The Journal of Politics* 66 (2004): 326-347; Berry, Fording and Hanson (2003) study AFDC (now TANF) from the 1960s to 1990. They argue that state competition exists in terms of AFDC benefits but it is very small. More importantly, states try to set their benefit levels to accord with the wages of low-skill labor within the state and are less focused on state competition. See William D. Berry, Richard C. Fording and Russell L. Hanson, “Reassessing the ‘Race to the Bottom’ in State Welfare Policy,” *The Journal of Politics* 65 (2003): 327-349.

<sup>46</sup> Pamela Clouser McCann, Charles Shipan and Craig Volden, “Top-Down Federalism: State Policy Responses to National Government Discussions,” *Publius* 45 (2015):495-525; Charles Shipan and Craig Volden, “Bottom-Up Federalism: The Diffusion of Antismoking Policies from U.S. Cities to States,” *American Journal of Political Science* 50 (2006): 825-843. Craig Volden, “States as Policy Laboratories: Emulating Success in the Children’s Health Insurance Program,” *American Journal of Political Science* 50 (2006): 294-312; Shipan and Volden, 2008.

Scholars explaining the diffusion of policy focus on the importance of elected political actors because they adopt legislation and participate in mechanisms such as learning. Individual legislator characteristics, such as the length of service and educational attainment, can predict whether legislators take cues from other states.<sup>47</sup> Structural factors, such as the professionalism of the legislature, can affect whether states emulate other states, adopt policies, and whether state policy will be responsive to public opinion.<sup>48</sup> States that provide higher salaries, more staff, and longer sessions to their legislators can provide resources and time for legislators to participate in policy learning. Figure 1 displays the conventional diffusion process.

Figure 1: Conventional Diffusion Process



<sup>47</sup> Patricia K. Freeman, "Interstate Communication among State Legislators regarding Energy Policy Innovation," *Publius* 15 (1985): 99-111.

<sup>48</sup> Charles R. Shipan and Craig Volden, "When the Smoke Clears: Expertise, Learning and Policy Diffusion," *Journal of Public Policy* 34 (2014): 357-287; Kathleen Hale, *How Information Matters: Networks and Public Policy Innovation* (Washington D.C.: Georgetown University Press, 2011); Elizabeth Rigby and Gerald C. Wright, "Political Parties and Representation of the Poor in the American States," *American Journal of Political Science* 57 (2013): 552-565; Jeffrey R. Lax and Justin H. Phillips, "The Democratic Deficit in the States," *American Journal of Political Science* 56 (2012): 148-166.

Overall, electoral and party dynamics such as party control of the state government and the government's ideology can influence the diffusion process.<sup>49</sup> The ideology of adopting states can provide ideological cues for officials in other states and states are more likely to emulate other states that have similar party compositions.<sup>50</sup> Governors are also critical actors at the state level and the timing of their election can determine adoption of certain policies.<sup>51</sup> State characteristics can play a role in diffusion because they can encourage elected officials to learn from states with similar characteristics as their own state or can provide electoral benefits for adopting certain policies. A state's internal characteristics, such as its constituency characteristics, "propensity towards innovation," size of the immigrant population, levels of education and urbanization can explain variation in policy diffusion.<sup>52</sup>

The diffusion literature recognizes how certain unelected actors can shape the diffusion of policy. Policy entrepreneurs, policy networks, and professional associations can contribute to the spread of policies across the United States.<sup>53</sup> Policy networks are critical because they enable

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<sup>49</sup> Grossback et. al (2004) focus on the ideological similarities across states to explain diffusion, but their model also demonstrates that the state's fiscal health and the fundamentalist Protestant state population influences diffusion. Lawrence J. Grossback, Sean Nicholson-Crotty, David A.M. Peterson, "Ideology and Learning in Policy Diffusion," *American Politics Research* 32 (2004): 521-545; Frances Stokes Berry and William D. Berry, "State Lottery Adoptions as Policy Innovations: An Event History Analysis," *American Political Science Review* 84 (1990): 395-415; Volden, 2006, Shipan and Volden, 2006 and Shipan and Volden 2008 use measures of state government ideology or unified party control in their studies of diffusion.

<sup>50</sup> Grossback et al, 2004; Volden, 2006.

<sup>51</sup> Frances Stokes Berry, "Innovation in Public Management: The Adoption of Strategic Planning," *Public Administration Review* 54 (1994): 322-330.

<sup>52</sup> Berry and Berry, 1990; Matthew C. Fellowes and Gretchen Rowe, "Politics and the New American Welfare States," *American Journal of Political Science* 48 (2004): 362-373. For a discussion on organization and innovation see Mohr 1969 who discusses how providing training and the size of health departments can facilitate innovation. Lawrence B. Mohr, "Determinants of Innovation in Organizations," *The American Political Science Review* 63 (1969): 111-126; Rodney E. Hero and Robert R. Preuhs, "Immigration and the Evolving American Welfare State: Examining Policies in the U.S. States," *American Journal of Political Science* 51 (2007): 498-517.

<sup>53</sup> Michael Mintrom, "Policy Entrepreneurs and the Diffusion of Innovation," *American Journal of Political Science* 41 (1997): 738-770; Michael Mintrom and Sandra Vergari, "Policy Networks and Innovation Diffusion: The Case of State Education Reforms," *The Journal of Politics* 60 (1998): 126-148;

state legislators and governors to gather information from “the federal government, subnational and professional associations, advocacy groups, research organizations, and other states.”<sup>54</sup>

These actors help policies spread by establishing and facilitating communication between elected officials and policy activists. Interest groups also use communication channels within and across states to increase support or opposition among the mass public, governors, and state legislators for the adoption of a new policy.<sup>55</sup> These networks are important because legislators and governors cannot adopt a neighboring states’ policy if they are unaware that the policy exists. Similarly, citizens that live near state borders or share media markets can be exposed to a neighboring state’s policies. These citizens can then exert pressure on their state legislators to adopt the policy.<sup>56</sup> In this way, unelected actors have an important role in policy diffusion. However, because the diffusion literature ignores implementation, it overlooks one of the most significant groups of unelected officials, bureaucrats, and how they can affect the policymaking process.

The implementation and policy feedback literatures tell us the way policy is put into practice is affected by politics<sup>57</sup> and can, in turn, affect politics. The design and implementation

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Steven J. Balla, “Interstate Professional Associations and the Diffusion of Policy Innovations,” *American Politics Research* 29 (2001): 221-245.

<sup>54</sup> Karen Mossberger and Kathleen Hale, “ ‘Polydiffusion’ in Intergovernmental Programs: Information Diffusion in School-to-Work Network,” *American Review of Public Administration* 32(2002): 398-422, 417.

<sup>55</sup> For example, unions have been active in supporting states increasing the minimum wage. Aaron C. Davis, “In Nation’s Capital, \$15 Dollar Minimum Wage is Headed Toward 2016 Ballot,” *Washington Post*, July 22, 2015. [https://www.washingtonpost.com/local/dc-politics/in-nations-capital-15-hour-minimum-wage-expected-to-appear-on-2016-ballot/2015/07/22/bdd9f66a-3086-11e5-97ae-30a30cca95d7\\_story.html](https://www.washingtonpost.com/local/dc-politics/in-nations-capital-15-hour-minimum-wage-expected-to-appear-on-2016-ballot/2015/07/22/bdd9f66a-3086-11e5-97ae-30a30cca95d7_story.html)

<sup>56</sup> Julianna Pacheco, “The Social Contagion Model: Exploring the role of Public Opinion on the Diffusion of Antismoking Legislation Across America,” *The Journal of Politics* 74 (2012): 187-202. Lax and Phillips (2009) also explored the role of public opinion and policy responsiveness. See Jeffry Lax and Justin Phillips, “Gay Rights in the States: Public Opinion and Policy Responsiveness,” *The American Political Science Review* 103 (2009): 367-386.

<sup>57</sup> As Brodtkin (1990) argues “policy politics (the contest to determine what policy should be) is ubiquitous; it neither begins with the formulation of a policy proposal nor ends with its enactment or

of policy can reshape interests and influence political participation.<sup>58</sup> The implementation of policy can also threaten a policy's continued existence.<sup>59</sup> The diffusion literature has begun to consider diffusion as a process and not just a discrete moment in time, such as adoption. Stages before adoption, such as agenda setting, matter for diffusion.<sup>60</sup> However, implementation can also be part of the diffusion process. Henry Glick and Scott Hayes (1991) find that late adopters of laws were more likely to include provisions that were missing from the statutes of early adopting states.<sup>61</sup> States do not invent these adjustments themselves, they learn about policy adjustments made during implementation from other states.<sup>62</sup> Indeed, states can also emulate or

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defeat." Similarly, Eric Patashnik (2008) notes "By itself, however, the passage of a reform act does not settle *anything*." See Evelyn Z. Brodtkin. Implementation as Policy Politics. In *Implementation and the Policy Process: Opening Up the Black Box*, Dennis J. Palumbo and Donald J. Calista (eds). (Westport, CT: Greenwood Press, 1990), 107; Eric Patashnik, *Reforms at Risk: What Happens After Major Policy Changes are Enacted* (Princeton, NJ: Princeton University Press, 2008), 3. Party control of state government can affect implementation. For example, Republican controlled states were more stringent in granting disability than states controlled by Democrats. Lael R. Keiser, "State Bureaucratic Discretion and the Administration of Social Welfare Programs: The Case of Social Security Disability," *Journal of Public Administration Research and Theory: J-Part* 9 (1999): 101. Party control, however, does not impact every aspect of implementation. For example, party control does not predict the percentage of people that apply for a child support exception, but it does explain the percentage of exceptions that are granted. See Lael R. Keiser and Joe Soss, "With Good Cause: Bureaucratic Discretion and the Politics of Child Support Enforcement," *American Journal of Political Science*, 42 (1998): 1133-1156. See also Kenneth J. Meier, Joseph Jr. Stewart, and Robert E. England, "The Politics of Discretion: Education Access as an Urban Service," *American Journal of Political Science* 35 (1991) 155-177.

<sup>58</sup> See Suzanne Mettler, *Soldiers to Citizens: The G.I. Bill and the Making of the Greatest Generation*, (Oxford University Press, 2005); Paul Pierson, "When Effect Becomes Cause: Policy Feedback and Political Change," *World Politics* 45 (1993): 595-628; Joe Soss, "Lessons of Welfare: Policy Design, Political Learning, and Political Action," *The American Political Science Review* 93 (1999): 363-380.

<sup>59</sup> Cohen and Moffitt, 2009.

<sup>60</sup> Graeme Boushey, *Policy Diffusion Dynamics in America* (New York: Cambridge University Press) 2010. See also Andrew Karch, *Democratic Laboratories: Policy Diffusion Among the American States* (University of Michigan Press) 2007.

<sup>61</sup> Henry R. Glick and Scott P. Hays, "Innovation and Reinvention in State Policymaking: Theory and the Evolution of Living Will Laws," *The Journal of Politics* 53 (1991): 835-850.

<sup>62</sup> Glick and Hayes (1991) as well as Mooney and Lee (1995) discuss this process of policy change as policy reinvention. Mooney and Lee define policy reinvention as "the extent to which and the ways in which a policy is changed as it diffuses among the states." Christopher Z. Mooney and Mei-Hsien Lee, "Legislative Morality in the American States: The Case of Pre-Abortion Regulation Reform," *Journal of Political Science* 39 (1995): 599-627, 608.

compete with each other by making the same legislative adjustments during implementation.<sup>63</sup> They can make these adjustments in the policy itself before adoption or when the state puts policy into practice.

Different mechanisms can also operate depending upon whether a state is adopting a policy and or expanding a policy.<sup>64</sup> Similarly, if governors and legislators receive electoral benefits for expanding the reach of policy, elected officials in other states may be more likely to emulate that state. Craig Volden (2006) argues that state emulation is more likely to occur when the policy is successful in terms of reducing the uninsured rate of children. The main mechanism of diffusion, policy learning, can also operate during, and as a result of, implementation.

Because policy learning involves learning about the existence of policies as well as the implementation of policy, I expect implementation to bear on whether states adopt diffusing policies. Preliminary findings from the diffusion literature and the policy feedback literature suggest that implementation can affect the adoption of policies. However, because diffusion studies predominantly explain only the moment of adoption,<sup>65</sup> we lack an understanding of why states implement the same, diffusing policy differently and how those differences, in turn, bear on whether other states adopt these policies. In the next section, I define what I mean by implementation then I turn to the literature on implementation to consider why states would implement the same policies differently and how the adoption of policy in other states could affect implementation.

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<sup>63</sup> Andrew Karch and Matthew Cravens, "Rapid Diffusion and Policy Reform: The Adoption and Modification of Three Strikes Law," *State Politics and Policy Quarterly* 14 (4): 461-491.

<sup>64</sup> Frederick J. Boehmke, and Richard Witmer, "Disentangling Diffusion: The Effects of Social Learning and Economic Competition on State Policy Innovation and Expansion," *Political Research Quarterly* 57 (2004): 39-51.

<sup>65</sup> For exceptions please see Boushey, 2010; Karch, 2007.

## Implementation as Policy Reach

In this dissertation, I focus on one form of implementation, policy reach. A state may adopt a policy with a particular goal. After this occurs, the state may take action to extend or constrain the policy's reach. Therefore, one form of policy implementation is policy reach, which is how and whether the state spreads a policy within its borders.<sup>66</sup> The seminal work on implementation by Jeffrey Pressman and Aaron Wildavsky (1984) argues that it is necessary to understand implementation as dispositions.<sup>67</sup> These dispositions are structured by the design of the policy and unexpected situations. Oftentimes implementation scholars also think about implementation in terms of compliance. Lawrence O'Toole (2000) defines implementation as "what develops between the establishment of an apparent intention on the part of government to do something, or stop doing something, and the ultimate impact in the world of action."<sup>68</sup> In addition to compliance, the process of putting policy into practice also may involve extending or restricting the policy's reach in the state.

Conceptualizing policy reach as a form of implementation allows for different types of actors and politics to bear on implementation. When implementation is treated as compliance, implementation scholarship is often confined to theorizing about the relationship between the principal and agent. It focuses on whether the agent carries out the preferences of the principal. It overlooks how the implementation of policy can affect other parts of the policy process.

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<sup>66</sup> This is different than Peter May's (2003) definition that states "The scope of the policy addresses the scale of the undertaking"(229). Policies can have different scales in its goals. However, policy reach involves the action of extending within the states' borders.

<sup>67</sup> Pressman, J.L. and Wildavsky, A. *Implementation*. (Berkeley and Los Angeles, CA: University of California Press, 1984),

<sup>68</sup> Laurence J. O'Toole, "Research on Policy Implementation: Assessment and Prospects," *Journal of Public Administration Research and Theory: J-PART* 10 (2000): 263-288, 266. Treating implementation as a process also involves compliance in that implementation is "is the timely and satisfactory performance of certain necessary tasks related to carrying out the intent of the law." James P. Lester and Malcolm L. Goggin, "Back to the Future: The Rediscovery of Implementation Studies," *Policy Currents* 8 (1998): 1-10, 5.

Policy reach also invites us to look beyond the internal and external forces imposed upon elected and bureaucratic officials. Instead, it provides different perspectives as to how elected and bureaucratic officials can decide whether and how to extend the reach of policy as well as how citizens can opt in or out of policies. Similarly, in thinking about implementation as dispositions, scholarship focuses on the relationship between policy design and implementation as well as how “policies are continuously transformed by implementing actions that simultaneously alter resources and objectives.”<sup>69</sup> However, conceptualizing implementation as “dispositions” makes implementation so fluid that it is impossible to define, operationalize, and generalize about.

Conceptualizing implementation as adaptation begins to consider the way actors can expand or restrict a policy’s reach. When conceptualizing implementation as adaptation, studies tend to focus on the street-level bureaucrat and the way that their characteristics or resource constraints structure implementation.<sup>70</sup> Bureaucrats may adapt a policy by denying policy benefits to certain individuals or trying to advertise programs so as to expand access to a policy. Policy reach builds off the conception of adaptation by taking seriously the role of state actors in structuring implementation. However, policy reach also considers the state level political and institutional factors that can affect a program systematically. Instead of emphasizing the individual bureaucratic decisions that determine policy implementation with each task performed every day, policy reach allows for a view of the implementation of the program as a whole. Bureaucrats in state departments and elected officials in the legislature may make decisions that can restrict or extend the reach of policy throughout their state.

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<sup>69</sup> Pressman, J.L. and Wildavsky, A. *Implementation*. (Berkeley and Los Angeles, CA: University of California Press, 1984), 170.

<sup>70</sup> Richard Elmore, “Backward Mapping: Implementation Research and Policy Decisions,” *Political Science Quarterly*, 1979-1980, 94:601-616; Michael Lipsky, “Street-Level Bureaucracy and the Analysis of Urban Reform,” *Urban Affairs Quarterly* 6 (1971): 391-409; Michael Lipsky, *Street-Level Bureaucracy: Dilemmas of the Individual in Public Services*, (Russell Sage Foundation: New York, 1980)

Policy reach is interesting to study because reach is not determined during adoption. There is room for state actors to determine reach and for implementation to matter in the policy process. Decisions of policy reach are made after the goal of the policy has been outlined in the adoption process. We can consider reach in geographic terms, numerical terms, or in other ways. For example, a statute may state the policy's goal is to provide public health information to state citizens. Offices in state departments can try to advertise programs to citizens so as to increase participation in a program, thereby extending the reach of the policy. We can also consider policy reach in terms of geography. Bureaucrats may concentrate their resources and provide this public health information in all the urban areas of a state, but they may not extend the reach of the policy into rural counties. Politics, state characteristics, interest groups, bureaucrats, and other dynamics can affect implementation as policy reach as states put policy into practice. Conceptualizing policy reach in this way allows us to systematically compare and assess implementation differences across states.

As policy is put into practice, implementers engage with interest groups, businesses, elected officials, and citizens within a state. Paul Sabatier and Daniel Mazmanian (1981) argue implementation is structured by two forces: statutory factors and non-statutory factors (like technology developments and socioeconomic factors).<sup>71</sup> Non-statutory factors are state characteristics that structure implementation. When the state begins to put policy into practice, these characteristics have an opportunity to influence the reach of the policy in practice.<sup>72</sup>

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<sup>71</sup> Paul A. Sabatier and Daniel A. Mazmanian, "The Implementation of Public Policy: A Framework for Analysis," in *Effective Policy Implementation*, Daniel A. Mazmanian and Paul A. Sabatier (eds), (D.C. Health and Company, 1981), 3-37.

<sup>72</sup> The characteristics of policies themselves can also affect implementation. For example, Richard Matland (1995) argues that the ambiguity and conflict surrounding a policy impacts implementation. For Matland, "building a more effective model of implementation requires a much more careful evaluation of a policy's characteristics."<sup>72</sup> For example, policies that are marked by greater degrees of conflict have more substantial obstacles to overcome in order to enter into the implementation process. Similarly,

Characteristics such as race and per capita income can influence how a policy is implemented.<sup>73</sup>

Therefore, similar characteristics across states can influence implementation of the same policy just as they influence policy learning in the diffusion process.

### Implementation Politics

The diffusion literature has failed to consider the role of bureaucrats in learning because they have failed to explore how implementation bears on policy adoption during diffusion. The implementation literature, however, has taken bureaucrats seriously. As George Edwards (1980) notes, “Public policies are rarely self-executing.”<sup>74</sup> We can evaluate policies today because they have been put into practice, many by bureaucrats, after they were adopted.

The implementation literature conceptualizes implementation as either a top-down or bottom-up process. Top-down oriented scholars argue that high-level bureaucrats make relevant implementation decisions and lower-level bureaucrats carry out those decisions. A top-down approach suggests “Successful implementation in the short run is especially dependent on the strength of the statute, particularly the degree of hierarchical integration, the commitment of

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policies that are more ambiguous allow for more local variation in the implementation of the same policy (Matland 2005). Other characteristics, such as the content and the policy problem, are also critical for implementation. According to Sabatier and Mazmanian (1980), three factors determine successful implementation “(1) the tractability of the problem(s) being addressed by the statute; (2) the ability of the statute to favorably structure the implementation process; and (3) the net effect of a variety of political variables on the balance of support for statutory objectives.” Haider-Markel (2002) also finds that problem tractability does increase the efforts to classify hate crimes and arrest for hate crimes; Paul Sabatier and Daniel Mazmanian, “The Implementation of Public Policy: A Framework Analysis,” *Policy Studies Journal* 4 (1980): 538-560, 541. Donald P. Haider-Markel, “Regulating Hate: State and Local Influences on Hate Crime Law Enforcement,” *State Politics and Policy Quarterly* 2 (2002): 126-160; Richard Matland, “Synthesizing the Implementation Literature: The Ambiguity- Conflict Model of Policy Implementation,” *Journal of Public Administration Research and Theory: J-PART* 5 (1995): 145-174.

<sup>73</sup> For examples please see Byungkyu Kim and Richard Fording, “Second-Order Devolution and the Implementation of TANF in the U.S. States,” *State Politics and Policy Quarterly* 10 (2010): 341-367 and Lael Keiser, Peter Muesser, and Seung-Whan Choi, “Race, Bureaucratic Discretion and the Implementation of Welfare Reform,” *American Journal of Political Science* 48 (2004) 314-327.

<sup>74</sup> George C. Edwards III, *Implementing Public Policy* (Washington D.C.: Congressional Quarterly Press, 1980).

agency officials, the presence of a “fixer” and the resources of various constituency groups.”<sup>75</sup>

Bureaucrats are central political actors in this conception of implementation.

Scholars arguing for a bottom-up interpretation of implementation focus on street-level bureaucrats. Michael Lipsky (1980) developed the concept of the street-level bureaucrat describing them as “public service workers who interact directly with citizens in the course of their jobs, and who have substantial discretion in the execution of their work.”<sup>76</sup> These bureaucrats face constraints and stresses in their daily work lives including insufficient resources, authority issues, and ambiguous expectations.<sup>77</sup> A major part of James Wilson’s (1989) study of the bureaucracy on organization is focused on the bureaucrat.<sup>78</sup> Richard Elmore (1979) supports this framework by arguing implementation as adaptation is more effective when the discretion of the street-level bureaucrat is maximized, instead of maximizing hierarchical control as top-down scholars suggest is most effective.<sup>79</sup>

Bureaucrats are at the center for both the bottom-up and top-down views of implementation, but are missing from diffusion scholarship. Kenneth J. Meier and Laurence J. O’Toole (2006) argue “bureaucracies must use resources, political skills, and strategic efforts to entice other governments, private organizations, and citizen groups to cooperate to implement policy.”<sup>80</sup> However, these bureaucracies also use resources and skills to extend the policy throughout the state’s borders, not only to induce cooperation. In implementing policy, bureaucrats are constrained by political control and their own values when they utilize resources

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<sup>75</sup> Sabatier and Mazmanian, 1981, 28.

<sup>76</sup> Lipsky, 1980, 3.

<sup>77</sup> Lipsky, 1971.

<sup>78</sup> James Q. Wilson, *Bureaucracy: What Government Agencies Do and Why They Do It* (Basic Books, 1989).

<sup>79</sup> Elmore, 1979-1980.

<sup>80</sup> Kenneth J. Meier and Laurence J. O’ Toole Jr. *Bureaucracy in a Democratic State: A Governance Perspective* (Baltimore, MD: The Johns Hopkins University Press. 2006), 18.

to implement policy.<sup>81</sup> The way that bureaucrats' professional identities are cultivated in agencies predicts the likelihood of introducing policy innovations into a bureaucracy.<sup>82</sup>

Institutional aspects of the bureaucracy can also affect implementation. Oftentimes this is treated as differences in state capacity. State capacity is "the ability to act once policymakers decide they want to act...it includes the human, budgetary, and institutional resources or infrastructure that governments possess."<sup>83</sup> It is important that these human and institutional resources can "anticipate and influence change; make informed, intelligent decisions about policy; develop programs to implement policy; attract and absorb resources; manage resources; and evaluate current activities to guide future action."<sup>84</sup> As David Cohen and Susan Moffitt (2009) note, putting policy into practice requires congruence between the aim of a policy and capabilities.<sup>85</sup> Paul Manna (2006) argues that the capacity of different levels of government within the U.S. federal system can help explain education reform because it determines the way in which policy entrepreneurs pursue education reform.<sup>86</sup>

Bureaucratic structure and institutional values are critical in explaining the varying way that states implemented prison education programs.<sup>87</sup> The size of the bureaucracy can also impact the implementation of district level programs.<sup>88</sup> Fiscal as well as bureaucratic aspects of

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<sup>81</sup> Wilson, 1989.

<sup>82</sup> Manuel P. Teodoro, "Bureaucratic Job Mobility and the Diffusion of Innovations," *American Journal of Political Science* 53 (2009): 175-189.

<sup>83</sup> Paul Manna, *School's In: Federalism and the National Education Agenda* (Washington D.C.: Georgetown University Press), 2006, 31.

<sup>84</sup> Beth Walter Honadale, "A Capacity-Building Framework: A Search for Concept and Purpose," *Public Administration Review* 41 (1981): 575-580, 577.

<sup>85</sup> David Cohen and Susan Moffitt, *The Ordeal of Equality: Did Federal Regulation Fix the Schools?* (Cambridge, MA: Harvard University Press, 2009).

<sup>86</sup> Manna, 2006.

<sup>87</sup> Edwards, 1980, 11; Ann Chih Lin, *Reform in the Making: The Implementation of Social Policy in Prison* (Princeton, NJ: Princeton University Press, 2000).

<sup>88</sup> Steven Balla, 2001.

capacity have the potential to explain variation in policy at different levels of government.<sup>89</sup>

Bureaucratic size and expertise can be especially critical for programs that have universal or large target populations such as voting reforms, universal programs, health policies, and education policies. Ariel White, Noah Nathan and Julie Faller (2015) conclude that “Although a policy might be written as universal, resource-constrained bureaucrats frequently have discretion over which services are delivered and to whom; discretionary decisions made by local bureaucrats often become de facto public policy.”<sup>90</sup>

One of the main relationships involved in implementation is the relationship between the bureaucracy and elected officials.<sup>91</sup> Elisabeth Gerber, Arthur Lupia, and Matthew McCubbins (2004) identify state legislatures as the implementation leader because they define the implementation rules. They also identify the implementation agent as the bureaucracy because it enacts the rules.<sup>92</sup> Because of this relationship, state legislatures can assign sanctions to the bureaucracy in attempts to increase compliance. Brian Gerber, Cherie Maestas, and Nelson

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<sup>89</sup> According to Goggin et al, organizational and ecological capacity is critical for implementation. The second aspect of capacity is ecological capacity defined “the contextual environment in which state government operates. It is determined by socioeconomic and political conditions in a state”. The authors combine institutional and fiscal capacity into organizational capacity while accounting for state characteristics in what they term ecological capacity. Dividing capacity into fiscal and bureaucratic capacity is a more appropriate division for the study of policy adoption and diffusion. Socioeconomic conditions of the state are better specified in terms of state characteristics because the environment of the state is not necessarily capacity. Instead, the financial resources and expertise of state political actors better aligns with Manna, Honadale, and Cohen and Moffitt’s understanding of capacity. Using bureaucratic capacity and fiscal capacity is the most appropriate and clear way to delineate the role of state capacity in the adoption and implementation of policy.

<sup>90</sup> Ariel R. White, Noah L. Nathan and Julie K. Faller, “What Do I Need to Vote? Bureaucratic Decision and Discrimination by Local Election Officials,” *American Political Science Review* 109 (2015): 129-142, 131. For bureaucratic discretion also see Lonna Rae Atkeson, Yann P. Kerevel, Michael R. Alvarez, and Thad E. Hall, “Who Asks for Voter Identification? Explaining Poll-Worker Discretion,” *The Journal of Politics* 76 (2014): 944-957.

<sup>91</sup> Compliance is not necessarily between elected and unelected officials. Bali (2007) has studied when compliance occurs after a popular initiative has passed. Valentina A. Bali, “Implementing Popular Initiatives: What Matters for Compliance?,” *The Journal of Politics* 65 (2003): 1130-1146.

<sup>92</sup> Elisabeth R. Gerber, Arthur Lupia and Matthew D. McCubbins, “When Does Government Limit the Impact of Voter Initiatives? The Politics of Implementation and Enforcement,” *The Journal of Politics* 66 (2004): 43-68

Dometrius (2005) argue legislatures may have more or less power in the implementation process depending on whether the legislature can exert power over administrative procedures (for example whether a legislature can or cannot veto rules with a review committee).<sup>93</sup>

Elected officials structure other aspects of implementation as well. Eugene Bardach (1977) centers implementation around political actors because he defines implementation as “a process of strategic interaction among numerous special interests all pursuing their own goals, which might or might not be compatible with the goals of the policy mandate.”<sup>94</sup> Independent actors try to avoid blame creating a defensive politics whereby there is “this sort is delay, a diversion of energies toward highly particularistic program goals, and, often, a flight from administrative or political responsibility.”<sup>95</sup> Other scholars have argued “state-level implementation decisions and actions need to be treated as the joint product of interactions among bureaucrats, politicians, and representatives or organized interests.”<sup>96</sup>

The governor’s relationship with the bureaucracy can also determine how policy is put into practice. Governors are in a better position to direct implementation when they have more control over the bureaucracy. When a governor has more power over appointing top bureaucrats or when bureaucrats report directly to her, they can direct implementation in a way that agrees with their electoral interests. The power of governors to appoint the state education chief increases the state’s control over determining graduation requirements as well as increases the

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<sup>93</sup> Brian J. Gerber, Cherie Maestas and Nelson C. Dometrius, “State Legislative Influence over Agency Rulemaking: The Utility of Ex Ante Review,” *State Politics and Policy Quarterly* 5 (2005): 24-46.

<sup>94</sup> Eugene Bardach, *The Implementation Game: What Happens After a Bill Becomes a Law* (The MIT Press: Cambridge MA, 1977), 9.

<sup>95</sup> Ibid, 42.

<sup>96</sup> Malcolm L. Goggin, Ann O’M. Bowman, James P. Lester, Laurence J. O’Toole, Jr., *Implementation Theory and Practice: Toward a Third Generation* (Scott, Foresman/Little, Brown Higher Education: Glenview, IL. 1990), 13.

likelihood that a state adopts education accountability policies.<sup>97</sup> Therefore, the governor may play a critical role in the implementation of policy when the governor appoints the chief bureaucrat of the relevant state agency by pressuring their appointee to expand the reach of a policy that will provide electoral benefits. However, this perspective does not include how other unelected actors can influence implementation.<sup>98</sup>

Party control of state governments, the control of elected officials over unelected officials, state characteristics, and bureaucracy characteristics vary across state governments. Therefore, states may implement the same policies differently. Implementation scholars have not used this variation to assess their theories of implementation because they have failed to consider the implementation of diffusing policies. By using the same policy that is diffusing across states, I examine how states implement the same policies differently in terms of reach. In the next section, I turn to the bureaucracy literature and how it can inform our expectations for how bureaucrats can participate in policy learning during implementation.

### Bureaucracy

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<sup>97</sup> Paul Manna and Timothy Harwood, "Governance and Educational Expectations in the U.S. States," *State Politics and Policy Quarterly* 11 (2011): 483-509; Russ Allen and Jill Clark, "State Policy Adoption and Innovation: Lobbying and Education," *State and Local Government Review* 13 (1981): 18-25.

<sup>98</sup> In addition to bureaucrats, the implementation literature has considered the role of other unelected actors (i.e. interest groups) in implementation. For example, strong interest groups and unions can direct implementation in a variety of policy areas including veteran's affairs, environmental policy, crime policy, and education policy. For example, Kesier and Miller (2010) argue states with stronger veteran's groups award VDC benefits at higher rates and states with stronger environmental groups have higher levels of public spending on regulation. Please also see Bruce A. Williams and Albert R. Matheny, "Testing Theories of Social Regulation: Hazardous Waste Regulation in the American States," *The Journal of Politics* 46 (1984): 428-458; Also, states with a higher percentage of union members had more inspections and cited violations during the implementation of the Occupational and Health Safety Act of 1970; Frank J. Thompson and Michael J. Scicchitano, "State Implementation Effort and Federal Regulation Policy: The Case of Occupational Safety and Health," *The Journal of Politics* 47 (1985) 686-707; Karch and Craven, 2014. However, interest group influence depends upon bureaucratic decision-making and capacity since interest groups are more influential when the state agency contracts services out to them. Christine A. Kelleher and Susan Webb Yackee, "A Political Consequence of Contracting: Organized Interests and State Agency Decision Making," *JPART* 19 (2008): 579-602.

Bringing implementation into the study of diffusion invites us to consider how bureaucrats bear on the state policymaking process. Applying diffusion to the study of implementation invites us to consider how the main mechanism of diffusion, policy learning, is operating throughout the policy process. Although the implementation literature has provided evidence of bureaucratic involvement in implementation, there is also a literature that focuses exclusively on the bureaucracy. This literature has examined on the role of bureaucrats in the policymaking process and argues bureaucrats can learn and innovate on their own. They can use their learning to influence the implementation of policy, the adoption of policy, as well as policy outcomes. Diffusion invites us to consider the role of state-level bureaucrats in the policymaking process. State-level bureaucrats are not restricted from learning and innovating within their own state. Instead, they have comparable departments across state borders. Therefore, state-level bureaucrats may also learn, innovate, and make policy based on learning from policy experiments in other states.

In this dissertation I argue that out-of-state politics, namely the adoption of the policy by another state, can bear on implementation within a state. The mechanism by which this occurs is policy learning, which bureaucrats participate in during diffusion. Daniel Carpenter's (2001) seminal work on bureaucratic autonomy shows how federal-level bureaucrats are autonomous and can become entrepreneurs themselves. Bureaucrats learn from experiments within their own agencies and innovate within their own agencies.<sup>99</sup> Bureaucrats can also learn from policy experiments across counties in a single state.<sup>100</sup> Through this learning and information gathering, bureaucrats gain expertise. Francis Rourke (1984) argues that "bureaucracies acquire

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<sup>99</sup> Daniel Carpenter, *The Forging of Bureaucratic Autonomy: Reputations, Networks, and Policy Innovation in Executive Agencies, 1863-1928* (Princeton, NJ: Princeton University Press, 2001).

<sup>100</sup> Lawrence M. Mead, *Government Matters: Welfare Reform in Wisconsin*, (Princeton: Princeton University Press, 2004).

expertise is through the concentrated attention they give to specific problems.”<sup>101</sup> The implementation literature acknowledges this expertise in their principal-agent models where bureaucrats have an informational advantage over their principal.<sup>102</sup> Although the majority of this literature pertains to federal-level bureaucrats,<sup>103</sup> findings support that bureaucrats can learn, gather information, and innovate.

Federal-level bureaucrats are not the only bureaucrats who can participate in these processes. State-level bureaucrats are also operating in bureaucracies, in relationship with elected officials, and charged with policy implementation. State-level bureaucrats may also learn and gather information via the processes described above. Many prominent studies on bureaucratic learning have explored how federal bureaucrats innovate and learn.<sup>104</sup> Just as bureaucrats in federal departments can learn from innovations within their department and across state departments, bureaucrats in state departments may also learn from themselves or look to other, similar departments in other states. Bureaucrats may learn from policy experiments. The diffusion literature has demonstrated that state officials can learn about policy experiments in other states.<sup>105</sup> Therefore, I expect state bureaucrats learn from the policy adoption and implementation of policies in other states.

The bureaucracy literature suggests that bureaucrats may act on the information they gather and may influence multiple parts of the policy process. Bureaucrats can initiate programs.

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<sup>101</sup> Francis E. Rourke, *Bureaucracy, Politics, and Public Policy*, (Brown Little, 1984), 17.

<sup>102</sup> Mathew D. McCubbins, Roger G. Noll, and Barry R. Weingast, “Administrative Procedures as Instruments of Political Control,” *Journal of Law, Economics, & Organization* 3 (1987): 243-277; Sean Gailmard and John W. Patty, *Learning While Governing: Expertise and Accountability in the Executive Branch*, (Chicago, IL: Chicago University Press, 2013).

<sup>103</sup> See Craig Volden. “Delegating Power to Bureaucrats: Evidence from the States.” *Journal of Law, Economics & Organization* 18 (2002): 187-220 for an exception.

<sup>104</sup> For example Carpenter, 2001. Other studies have focused on the subnational level. Please see Meier and O’Toole, 2006; Keiser, 1999; Keiser and Soss, 1998.

<sup>105</sup> Charles R. Shipan and Craig Volden, “When the Smoke Clears: Expertise, Learning and Policy Diffusion,” *Journal of Public Policy* 34 (2014): 357-287.

Daniel Carpenter (2001) notes, “These agencies can initiate and manage programs without statutory authorization. They regularly make program innovations that elected officials did not direct them to take.”<sup>106</sup> Bureaucrats may make rules and may delay rulemaking for political purposes.<sup>107</sup> Bureaucrats may also affect outcomes. Susan Moffitt (2014) demonstrates that participatory bureaucracy can lead to better outcomes.<sup>108</sup> Bureaucratic discretion can also determine outcomes.<sup>109</sup> Bureaucrats may affect outcomes even when they are elected.<sup>110</sup> These studies demonstrate that bureaucrats can learn from policy adoption and implementation and it can bear on subsequent policy implementation and policy outcomes.

Bureaucrats can affect other stages of the policy process as well. The implementation and bureaucracy literatures focus on the effect of bureaucrats on implementation, but there is also evidence to suggest that bureaucrats can influence adoption. As bureaucrats gather information and gain bureaucratic expertise, they can “give advice that often shapes the decisions of political officials.”<sup>111</sup> Carpenter’s (2001) work also supports the idea that bureaucrats can affect policy adoption. Part of bureaucratic autonomy is changing the minds of elected officials “to induce national politicians to consider (and in many cases pass) laws that otherwise would never have been entertained.”<sup>112</sup> An example of this occurred when Wisconsin reformed its welfare system. Lawrence Mead (2004) noted “Policymakers thought up and tried new

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<sup>106</sup> Carpenter, 2001, 15

<sup>107</sup> Rachel Augustine Potter, “Slow-Rolling, Fast-Tracking, and the Pace of Bureaucratic Decisions in Rulemaking,” Forthcoming in the *Journal of Politics* (2017).

<sup>108</sup> Susan Moffitt, *Making Policy Public: Participatory Bureaucracy in American Democracy*, (Cambridge University Press, 2014).

<sup>109</sup> Pamela J. Clouser McCann, “Agency Discretion and Public Health and Service Delivery,” *HSR: Health Services Research* 44(2009): 1897- 1908.

<sup>110</sup> Please see Michael Sances, “The Distributional Impact of Greater Responsiveness: Evidence From New York Towns.” *Journal of Politics* 78 (2016): 105-119.

<sup>111</sup> Rourke, 1984, 20.

<sup>112</sup> Carpenter, 2001, 33-34.

programs, drawing on precedents in other state or the wisdom of the bureaucracy.”<sup>113</sup> Based on this scholarship, I expect state-level bureaucrats participate in bureaucratic learning during the diffusion process and act on this learning by encouraging elected officials to adopt appropriate policies.

In learning about the adoption and implementation of policy in other states, bureaucrats can apply those lessons in their own states. I expect bureaucrats to apply those lessons in two ways. First, they will use their learning to influence the implementation of similar policies within their own state. As seen in Figure 2, when bureaucrats learn of an innovation they can make adjustments to their own programs to mirror the effects of policies in other states. It is also possible bureaucrats learn of an innovation but are unable to make appropriate adjustments to their own policies. Overall, they can try to achieve similar goals as the other state’s innovation within their own agency and without the state adopting a new policy.

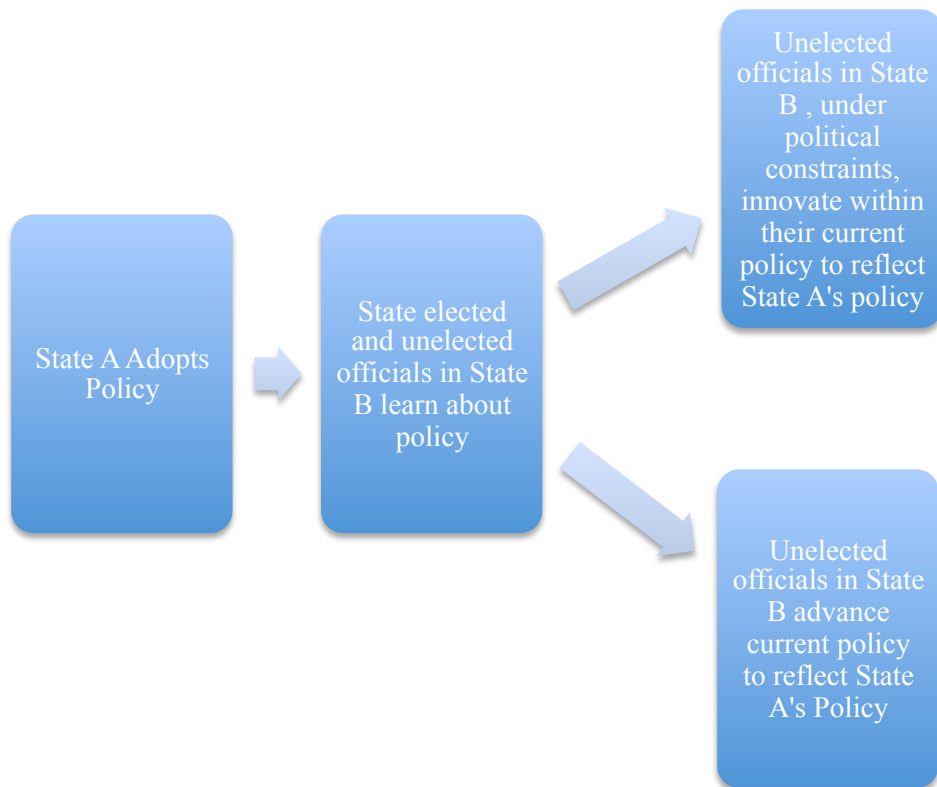
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<sup>113</sup> Mead, 2004, pg. 106.

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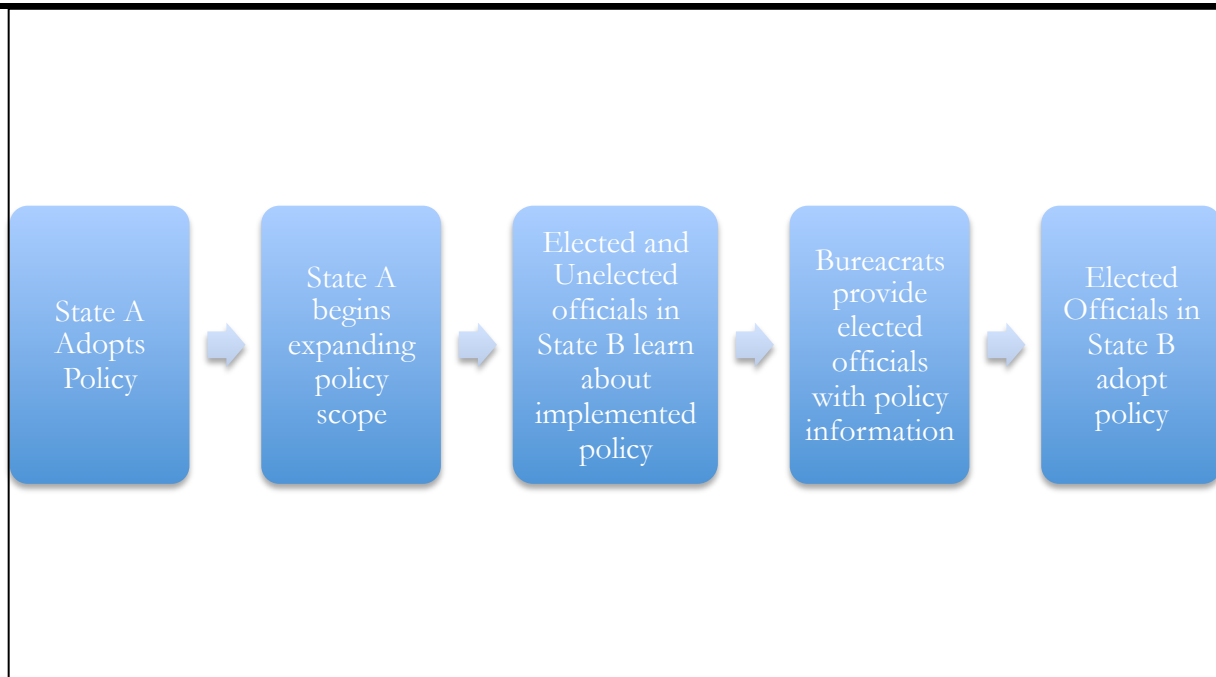
Figure 2: How Out-of-State Politics Can Facilitate Bureaucratic Learning in Implementation

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Second, bureaucrats will use their learning to influence the adoption of policies in their own state. Just as bureaucrats can influence policy adoption at the federal level and just as legislators use policy learning to adopt policies, bureaucrats will supply information to legislators to encourage the adoption of policies that are most appropriate for the state. This process can be seen in Figure 3. Through the learning of bureaucrats, out-of-state adoption politics can bear on implementation within a state and out-of-state implementation can bear on the adoption of policy within a state.

Figure 3: Diffusion with Bureaucratic Learning



### Democratic Implications

The study of diffusion began with the idea that states can operate as democratic laboratories. States can invent and experiment with policies that serve their residents. Other states can learn from those experiments and, if elected officials so choose, can adopt those policies for their own state residents. In this way, citizens can innovate or choose policies, through their elected officials, that are most appropriate for their state. However, because the diffusion literature has focused almost exclusively on the adoption of diffusing policies, they have overlooked other parts of the policy process. In doing this, they have diminished the role that other state officials play in the policymaking process.

Conceptualizing diffusion as a process that involves implementation elevates the role of unelected officials who play an important role in democratic governance. Bureaucrats are primary actors in the implementation of policy at all levels of government. However, their actions are not necessarily constrained to implementation as they can involve themselves in other

part of the policy process as well. Bureaucrats participate in bureaucratic learning during the diffusion process and influence both implementation and adoption during this process.

In this way, state policymaking in one state can influence other states that never adopted the policy. By applying policy learning to the implementation of policies in their own states, bureaucrats can adapt policy experiments in other states to their current programs thereby changing the implementation of policies in their states. In doing so, they may be better able to achieve the goals outlined in their own state's policy and contribute to democratic governance. Elected officials and policy entrepreneurs continue to be significant drivers of the diffusion process, but unelected bureaucrats are structuring this process as well.

Bureaucratic learning can support democratic governance by enabling bureaucrats to more effectively implement the policies chosen by the people. Bureaucrats can also support democratic governance by helping elected officials learn from policies in other states. They can provide information to elected officials so that they are better able to make appropriate policy decisions for their constituents. In these ways, the role of bureaucrats in state policymaking may enhance democratic governance rather than constrain it.

## Conclusion

I have presented a theory in this chapter that expects out-of-state adoption politics to bear on implementation and out-of-state implementation to bear on adoption during diffusion. This occurs through the process of bureaucratic learning. Although the diffusion literature recognizes the role of legislators in policy learning, I change our perspective by considering the role of unelected bureaucrats in bureaucratic learning.

My work in this dissertation contributes to the diffusion, implementation, and bureaucracy literatures. The diffusion literature, in focusing on the moment of adoption, has

disproportionately studied the role of elected officials in diffusion. By introducing implementation and the role of unelected officials in policymaking, my study reveals how bureaucrats are contributing to the diffusion process. The implementation literature has studied the implementation of federal policies across states or the implementation of policy in a single state. By using the lens of diffusion, I can draw on the variation of subnational governments in implementation. This provides leverage for thinking about how politics in other states can influence how policy is put into practice. The bureaucracy literature has focused on either bureaucrats at the federal level or how street-level bureaucrats use discretion to affect policy implementation. The lens of diffusion also allows us to see greater variation in bureaucratic learning and activity by re-focusing attention to bureaucrats at the state level.

In the following chapter I present evidence to support this theory. State prekindergarten policies provide leverage to assess whether and how states are operating as laboratories of bureaucracy. Universal pre-kindergarten is a state-created and state-adopted policy that has spread across the United States since 1995. In the next chapter, I describe the creation and adoption of universal pre-kindergarten, explore how three states came to adopt universal pre-kindergarten, and conduct a large-N analysis of the diffusion of universal pre-kindergarten. The analysis supports that bureaucrats are important actors in the adoption of policy.

## CHAPTER 2: THE DIFFUSION STORY

“In 1996 we embarked on another journey. We took Georgia where no state has ever gone before. At that time I compared it to Columbus sailing off into the unknown... We became the first state in the history of this nation to offer pre-kindergarten free of charge to every four year old whose parents want it.”<sup>114</sup> Zell Miller

### Zell Miller and the Early Start of Universal Pre-kindergarten

As a teacher in Georgia, Grady Miller, valued not only his own education, but the education of his children as well. His son Zell shared the same belief as his late father, so he took full advantage of the GI Bill to fulfill his academic ambitions. After he finished school, Zell entered politics and became a state senator.<sup>115</sup> It was Zell Miller’s education and the education of his fellow Georgians that defined his first trials as a politician. The main political issue of his first legislative session centered on segregation in schools.<sup>116</sup> These personal and political issues inspired Zell Miller’s interest in improving his state’s education system. Throughout his career, he thought of two innovative ways for the state to help students in Georgia-one to improve access to higher education, the other to improve access to early childhood education.

For Zell Miller, the time to introduce his ideas on education was in a competitive Democratic primary for Georgia’s 1990 gubernatorial election. He argued for the adoption of a state lottery so that the state could use those revenues to support two new education policies-state funded college scholarships and state funded pre-kindergarten. Although residents and education groups were concerned that these funds would supplant education spending rather than

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<sup>114</sup> Zell Miller, “State of the State,” The Georgia General Assembly, Atlanta, 1998, <https://www.youtube.com/watch?v=v4x127meHmc>.

<sup>115</sup> Richard, Hyatt, *Zell: The Governor Who Gave GA Hope* (Mercer University Press, 1991).

<sup>116</sup> Ibid, 112

supplement it, the majority of voters approved the constitutional amendment.<sup>117</sup> The lottery amendment specifies that the proceeds will be directed towards education.<sup>118</sup> Although the wording of the amendment did not require that preschool be universal, in 1995 Governor Miller declared that Georgia's state preschool program was open to any and all four-year-olds who wished to participate. Since Georgia adopted universal pre-k in 1995, 8 other states and Washington D.C. have adopted universal pre-k.

How did the idea of one gubernatorial candidate in 1990 become a policy reality in eight additional states and featured in President Obama's 2013 State of the Union Address?<sup>119</sup> This chapter examines the diffusion pattern of universal pre-kindergarten. First, this chapter will review the theory guiding this research as well as provide further details about the policy of universal pre-kindergarten. Then, I will examine how and why the policy of universal pre-kindergarten has spread to these nine states. Finally, I will analyze what the traditional diffusion model can and cannot tell us about policy diffusion. Chapters 3 and 4 continue the analysis by explaining why states implement the same policies differently and how these differences influence adoption.

### Review of the Framework

Policy diffusion is the spread of policies across the U.S. states. The current scholarship on policy diffusion uses state characteristics, political actors, and policy characteristics to explain why and when states will adopt certain policies- the measure of policy diffusion. States can

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<sup>117</sup> Anthony Radon, "Universal Prekindergarten in Georgia: A Case Study of Georgia's Lottery Funded Pre-k Program," Foundation for Child Development, 1999, <http://fcd-us.org/sites/default/files/Universal%20PreK%20in%20Georgia.pdf> (accessed February 29, 2016).

<sup>118</sup> "The Constitution of the State of Georgia," Revised January 2005, <http://www.senate.ga.gov/Documents/gaconstitution.pdf>

<sup>119</sup> President Barack Obama, "The State of the Union," February 12, 2014, <http://www.politico.com/story/2013/02/state-of-the-union-2013-president-barack-obamas-speech-transcript-text-087550?o=4>. Obama stated that "Tonight, I propose working with states to make high-quality preschool available to every child in America."

adopt the same policies as their neighboring states in order to compete with or emulate states in the region or because of socialization and even coercion.<sup>120</sup> The mechanism of learning is present when states learn about new policies from their neighboring states and then decide to adopt those policies. Diffusion is about much more than the adoption of policy because what happens after adoption can change the pattern of diffusion and even redefine the policy itself.

Implementation can structure diffusion by influencing whether states adopt policies. State actors can incorporate the implementation experiences of other states into their decisions of whether or not to adopt a policy, extending the mechanism of learning into implementation. Because implementation is part of the diffusion process, I expect internal implementation politics to bear on adoption, policy adoption to bear on implementation, and implementation to bear on subsequent policy adoption. In this way, out-of-state politics affects both the adoption and the implementation of diffusing policies.

Ignoring implementation as part of the diffusion process limits us from looking beyond electoral politics. Incorporating implementation into diffusion can reveal how internal implementation politics and unelected officials can bear on diffusion by affecting adoption. This chapter assesses how bureaucrats and internal implementation affected the diffusion of universal pre-kindergarten. In the following sections I describe the policy of universal pre-kindergarten, how universal pre-kindergarten was adopted in three states, and I conduct a fifty state analysis to assess the spread of universal pre-kindergarten. The models in this chapter build off one another by incorporating bureaucratic and internal implementation variables into a traditional diffusion

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<sup>120</sup> Jack L. Walker, "The Diffusion of Innovations among the American States," *American Political Science Review* 63 (1969): 880-899; Erin R. Graham, Charles R. Shipan and Craig Volden, "The Diffusion of Policy Diffusion Research in Political Science," *British Journal of Political Science* 43 (2013): 673-701, pg. 690

model. Chapter 4 continues to build on this analysis by incorporating out-of-state implementation in to the model. Therefore, Chapter 4 presents the full diffusion model.

### Universal Pre-kindergarten

Universal pre-kindergarten is an appropriate policy to explore the interaction of adoption and implementation in the diffusion process because this idea originated in, was adopted by, and then implemented by the states. This is distinct from state implementation of federal policies. When the federal government incentivizes states to adopt policies or charges them with the implementation of policy, states are not necessarily interested or invested in the policy. Furthermore, when states adopt state-originated policy, they are one of the primary authorities on implementation.<sup>121</sup> Whereas the federal government provides guidance or rules for the adoption and implementation of federal policies, states are responsible for choosing to adopt the policy and for expanding the reach of the policy once it is adopted. Therefore, state level political dynamics are more important for the diffusion and implementation of state-created policies.

Universal pre-kindergarten is also an appropriate case study because of the pace of adoption. Over the span of nineteen years, universal pre-k has been adopted by nine states in multiple regions of the country including the South, Midwest, and the Northeast.<sup>122</sup> The policy continues to spread as Vermont adopted universal pre-kindergarten in 2014 and now cities, such as New York City and Philadelphia, are adopting their own local-level programs.<sup>123</sup>

Traditionally, diffusion scholars have not only been concerned with who adopts a policy, but also

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<sup>121</sup> States may be one of many implementing authorities. Localities, districts, third party providers, NGOs, and others may also be implementing authorities.

<sup>122</sup> W. Steven Barnett, Megan E. Carolan, James H. Squires and Kristy Clarke Brown, "The State of Preschool 2014: State Preschool Yearbook," The National Institute for Early Education Research, 2014, <http://nieer.org/yearbook>, (accessed February 29, 2016).

<sup>123</sup> This analysis does not include diffusion between states and localities. At this time, there are only a few cities that have their own pre-kindergarten policies. Although policies can spread from localities to states, all analysis is at the state level. Please see Shipan and Volden, 2006.

how fast a state adopts a policy. Walker's (1969) seminal work on diffusion states "We are studying the relative speed and the spatial patterns of adoption."<sup>124</sup> Universal pre-k has spread slowly with nine states adopting the policy. This makes universal pre-k an appropriate policy because of recent criticism that diffusion scholarship has a pro-innovation bias.<sup>125</sup> Universal pre-k allows us to ask why this policy spread slowly and whether aspects of policy reach contribute to the pace and shape of diffusion.

### Targeted and Universal Pre-Kindergarten Policies Through the Decades

According to the National Institute for Early Education Research (NIEER), state-funded pre-kindergarten is when an "initiative is funded, controlled, and directed by the state," when "early childhood education is focus of the initiative," when it "offers group learning at least 2 times a week," and when it is "distinct from the state's system for subsidized child care."<sup>126</sup> Most states have a targeted pre-kindergarten program where access is limited to students who meet certain requirements such as living below the poverty line or having certain risk factors. Universal pre-k is distinct from targeted pre-kindergarten because it promises access to pre-kindergarten to all four-year-olds who wish to participate. As Chris Curran notes "universal preschool programs provide government-funded preschool to all children regardless of economic background, disability status, neighborhood poverty, or other qualifying characteristics."<sup>127</sup> Both universal and targeted programs have the goal of educating four-year-olds, but the reach of universal pre-kindergarten and targeted programs is likely to be different because targeted programs have eligibility requirements.

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<sup>124</sup> Walker, 1969, 881.

<sup>125</sup> Andrew Karch, Sean C. Nicholson-Crotty, Neal D. Woods, and Ann O'M. Bowman, "Policy Diffusion and the Pro-Innovation Bias," *Political Research Quarterly*, 69 (2016): 83-95.

<sup>126</sup> Barnett et al., 2014, pg. 19.

<sup>127</sup> Chris Curran, "Expanding Downward: Innovation, Diffusion, and State Policy Adoptions of Universal Preschool," *Education Policy Analysis Archive* 23 (2015): 2.

Before starting kindergarten, many four-year-old students across the country have the opportunity to attend pre-kindergarten classes. In the 2014-2015 school year 1.2 million four-year-olds, or 29% of four-year-olds, attended state pre-kindergarten programs.<sup>128</sup> Pre-kindergarten, or preschool, is seen as distinct from childcare because of the educational focus of the classes. Both state governments and the federal government have been active in providing pre-kindergarten education since the creation of Head Start at the federal level. Federal inaction, research on brain development, and longitudinal preschool studies created interest and opportunity for state action in pre-kindergarten policy.<sup>129</sup> The combination of these factors has contributed to an increase in attentiveness to early education issues across the U.S. states.

Wisconsin was the first state to provide pre-kindergarten to its residents. The state's constitution, adopted in 1848, gave the state the responsibility for providing education for all residents starting at the age of four. However, support for pre-kindergarten education waned throughout the years and the state began actively focusing on pre-k education in 1984.<sup>130</sup> Although California did not have pre-kindergarten in its state constitution, it led in early childhood education when it adopted a targeted pre-kindergarten program in 1965. However, other states were slow to follow California's example; there was little state action on preschool policy in the 1970s. In the early 1980s, Illinois, Maine, Michigan, Oregon, South Carolina, Texas, Maryland, West Virginia, Wisconsin and Washington all adopted their own targeted pre-kindergarten programs. The late 1980s was also an active time for pre-k policies with Colorado,

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<sup>128</sup> W. Steven Barnett, Friedman-Krauss, A. H., Gomez, R. E., Horowitz, M., Weisenfeld, G. G., & Squires, J. H. (2016). *The State of Preschool 2015: State Preschool Yearbook*. New Brunswick, NJ: National Institute for Early Education Research.

<sup>129</sup> Andrew Karch, *Early Start: Preschool Politics in the United States* (Ann Arbor: University of Michigan Press, 2013); Brenda K. Bushouse, *Universal Preschool: Policy Change, Stability, and the Pew Charitable Trusts* (Albany: SUNY Press, 2009), 3. Bushouse argues that these three factors also led to Pew's interest in universal pre-k.

<sup>130</sup> Wisconsin Council of Children and Families, "The Unique History of Four-Year-Old Kindergarten in Wisconsin, September 2010, [http://www.wccf.org/assets/great\\_start\\_6\\_history\\_4K.pdf](http://www.wccf.org/assets/great_start_6_history_4K.pdf)

Florida, Iowa, Louisiana, and Massachusetts each adopting targeted pre-kindergarten programs.<sup>131</sup>

The nation began focusing on school readiness after the 1989 Charlottesville Summit established the ideas of national performance goals and school readiness.<sup>132</sup> Therefore, the 1990s was a popular time for states to adopt pre-kindergarten policies with fourteen more states adopting targeted pre-kindergarten policies. Alabama, Nevada, New Mexico, North Carolina, and Pennsylvania all adopted pre-kindergarten programs in the early 2000s. In the late 2000s, Alaska, Rhode Island, and Mississippi adopted pre-k programs. Both Hawaii and Mississippi are currently establishing targeted pre-kindergarten programs in the 2014-2015 school year. Mississippi passed the Early Learning Collaborative Act of 2013 and Hawaii's Executive Office of Early Learning, created in 2012, is currently establishing a pre-k program.<sup>133</sup> Many states adopted targeted programs during the 1990s and by 2014 most states have some form of a state pre-kindergarten program. Graphs 2.1, 2.2, and 2.3 demonstrate the geographic spread of pre-kindergarten policies across the states over twenty-four years.

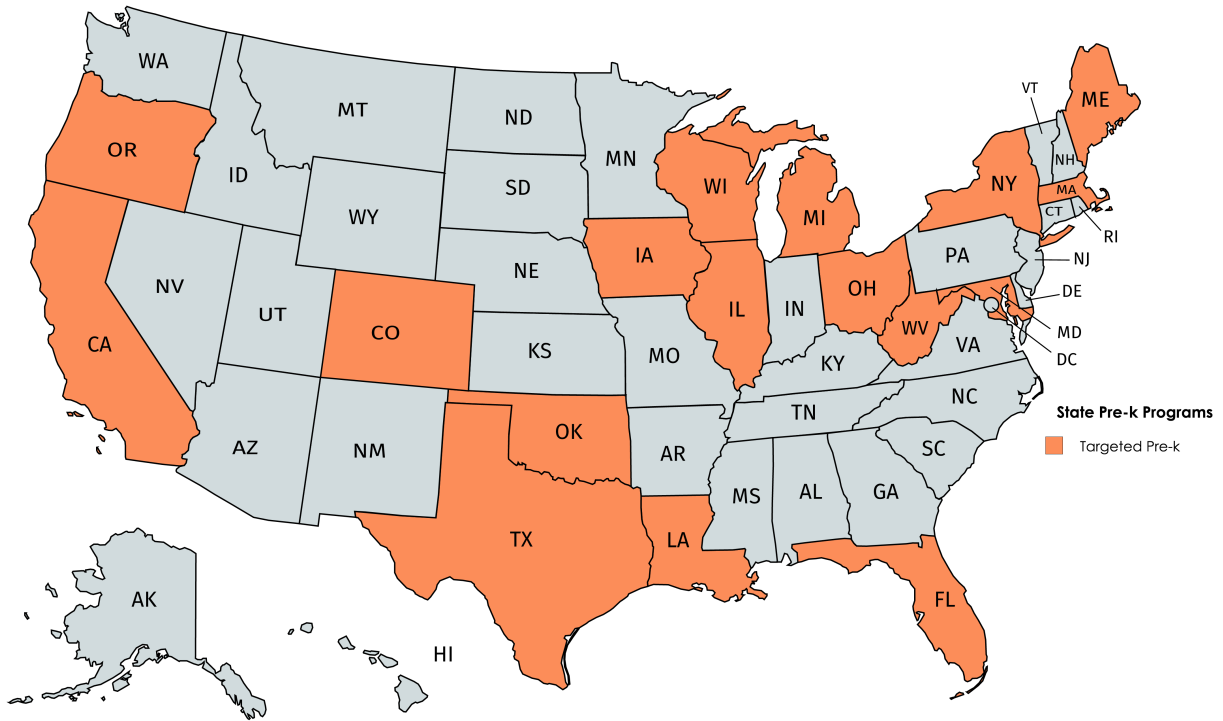
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<sup>131</sup> Barnett et al, 2014.

<sup>132</sup> Maris A. Vinovski, "The Road to Charlottesville: The 1989 Education Summit," September 1999, National Education Goals Panel <http://govinfo.library.unt.edu/negp/reports/negp30.pdf> (accessed February 20, 2015)

<sup>133</sup> Barnett et al, 2014.

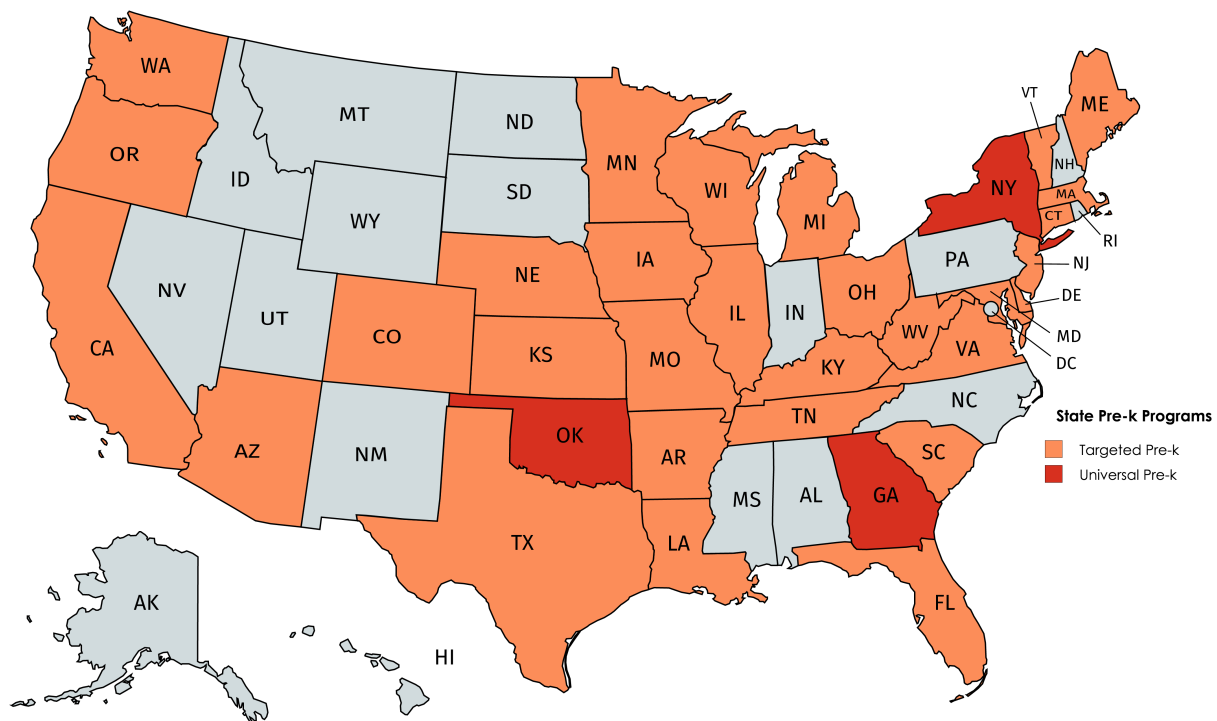
**Graph 2.1: State Pre-k Policies Before 1990**



created with mapchart.net ©

Source: Author's map generated with data from the National Institute for Early Education Research's State of Preschool Yearbooks.

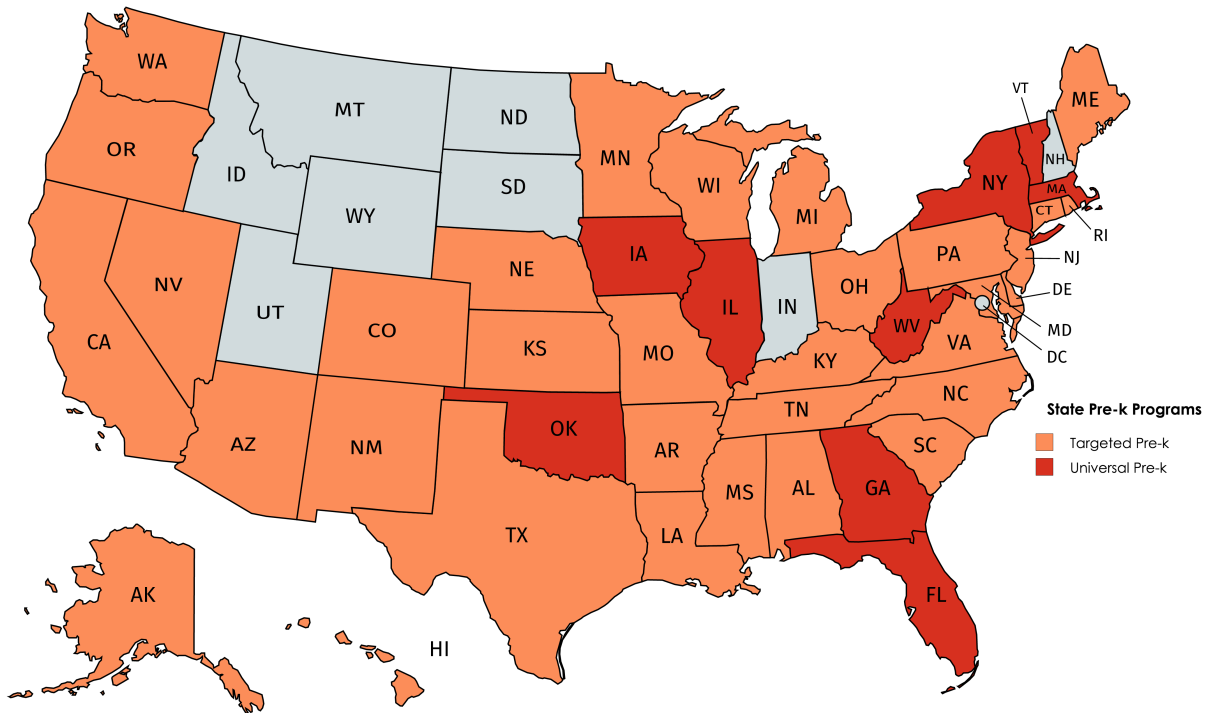
**Graph 2.2: State Pre-k Policies Before 2000**



Created with mapchart.net ©

Source: Author's map generated with data from the National Institute for Early Education Research's State of Preschool Yearbooks.

**Graph 2.3: State Pre-k Policies in 2014**



Created with mapchart.net ©

Source: Author's map generated with data from the National Institute for Early Education Research's State of Preschool Yearbooks.

Most of the targeted pre-kindergarten programs target at risk children so that they have access to pre-kindergarten education and begin kindergarten ready to learn. Many states established their pre-kindergarten programs to fulfill its responsibility to provide equal educational opportunities to state residents. For example, New Jersey established its pre-kindergarten program in certain districts, called Abbott districts, after the New Jersey Supreme Court required the state provide more equitable educational opportunity.<sup>134</sup> Kentucky also adopted a targeted pre-kindergarten program as part of a larger educational reform package in

<sup>134</sup> Ibid.

1990 to address educational inequalities within the state.<sup>135</sup> Although many states have adopted targeted pre-k policies, nine states have adopted universal pre-k since 1995.

#### The Diffusion of Universal Pre-kindergarten

Georgia was the first state to adopt universal pre-kindergarten. New York and Oklahoma quickly followed. In the same year West Virginia passed legislation establishing universal pre-k, Florida citizens voted to amend the state constitution and establish a universal pre-k program. Since 2002, Massachusetts, Illinois, Iowa, and Vermont have all adopted universal pre-kindergarten. Most recently, Vermont adopted universal pre-kindergarten in 2014.<sup>136</sup>

Table 2.1: Adoption of Universal Pre-k by Year

| State         | Year of Adoption |
|---------------|------------------|
| Georgia       | 1995             |
| New York      | 1997             |
| Oklahoma      | 1998             |
| Florida       | 2002             |
| West Virginia | 2002             |
| Massachusetts | 2005             |
| Illinois      | 2006             |
| Iowa          | 2007             |
| Vermont       | 2014             |

Source: Author's table generated with data from the National Institute for Early Education Research

Although each of these states has made a commitment to provide pre-kindergarten classes to any four-year-old in the state who wants to participate, the cases of Georgia, New York, and West Virginia provide insight into the broader patterns of adoption. These cases demonstrate how the governor, the relationship between the governor and the legislature, internal implementation politics, and bureaucratic officials have contributed to the diffusion of universal

<sup>135</sup> William H. Hoyt, "An Evaluation of the Kentucky Education Reform Act," Center for Business and Economic Research at the University of Kentucky, [http://cber.uky.edu/Downloads/kentucky\\_education\\_reform\\_act.htm](http://cber.uky.edu/Downloads/kentucky_education_reform_act.htm).

<sup>136</sup> Please see Appendix F for the state statutes establishing universal pre-kindergarten.

pre-k. Although each of these states faced different obstacles in adopting universal pre-kindergarten, they demonstrate how relationships among the branches of government, even those traditionally designated as being involved in implementation, are involved in the adoption of diffusing policies. They also demonstrate how party politics, internal implementation concerns, prior bureaucratic reforms, and appointed officials can be involved in the adoption of policy.

### Georgia

Prior to Georgia adopting universal pre-k in 1995, 25 states had adopted some sort of targeted pre-kindergarten program that targeted children who lived below the poverty level or experienced certain risk factors. Georgia revolutionized early childhood education policy by transforming the idea of state pre-kindergarten as a program for a few, to making it a program for all. In 1989, Zell Miller, the Lieutenant Governor, faced a challenging Democratic primary in running for the office of the Governor. Part of his platform was to establish a lottery that would fund expansive education programs. He estimated that the 90 million dollars needed for pre-kindergarten could come from the lottery.<sup>137</sup> His campaign championed the lottery and the subsequent educational benefits:

The Miller message was that the lottery proceeds would be controlled by a separate agency and that profits would go toward special programs such as a statewide pre-kindergarten for 4-year-olds, scholarships, and a high-tech linkup for Georgia schools. Miller was never specific about what programs would be implemented, only that it would go for new and different programs and not supplant existing funds. Because he was not sure how much money would be generated, he tried to be general and vague.<sup>138</sup>

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<sup>137</sup> Charles Walston, "Miller: Preschool needs lottery Gambling foes say Florida failing in education funding," *The Atlanta Journal Constitution*, September 9, 1992.

<sup>138</sup> Richard Hyatt, *Zell: The Governor Who Gave GA Hope* (Mercer University Press, 1991). 242.

In order to establish a lottery, Miller had to ratify the Georgia Constitution, which required two-thirds vote in the legislature and ratification by the voters.<sup>139</sup>

Even with public support, Miller faced an uphill battle as numerous religious groups, the acting governor, and the Speaker of the House opposed the lottery. More surprisingly, many education groups were also opposed to using lottery funds for education. Groups like “the Georgia State PTA and the Georgia School Board Association...both opposed plans that would tie lottery funds to education.”<sup>140</sup> The reasoning was that “the lottery would create the false impression that education problems were being addressed while the schools remained woefully underfunded.”<sup>141</sup> In order to garner support and ensure that the lottery funds was not “a cheap political ploy,” Miller had to ensure that the money from the lottery would not replace existing funds but would be separate from the education budget. Although there was some opposition to Miller’s vision, most of it centered on the establishment of the lottery and not the use of funds. As Brenda Bushouse (2009) notes “The advocacy environment for and against the referendum was focused on the lottery; there was virtually no attention to preschool at the time. This is due in large part to the absence of policy advocates in the development of the preschool policy alternative.”<sup>142</sup>

Governor Miller also faced a battle with Speaker Murphy in the legislature. Although the lottery bill passed the Senate, it was killed in committee due to Speaker Murphy’s opposition. However, a poll conducted before Governor Miller introduced any legislation revealed that “49 percent of all legislators said they favor a lottery referendum...about one in five House members

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<sup>139</sup> Anthony Raden, “Universal Prekindergarten in Georgia: A Case Study of Georgia’s Lottery Funded Pre-k Program,” Foundation for Child Development, May 1999, <http://fcd-us.org/sites/default/files/Universal%20PreK%20in%20Georgia.pdf>, accessed February 29, 2016.

<sup>140</sup> Raden, 1999, pg.12.

<sup>141</sup> Raden, 1999 pg. 10.

<sup>142</sup> Brenda K. Bushouse, *Universal Preschool: Policy Change, Stability, and the Pew Charitable Trusts* (Albany: SUNY Press, 2009). 29.

said they didn't know how they will vote on the issue.”<sup>143</sup> After winning the election with a platform focused on establishing the lottery, the Speaker and the chairman of the House Industry Committee, legislator Watson Jr., were more open to holding hearings on the potential legislation.

The main controversy over the bill, however, was who would be in control of the funds produced by the lottery. Governor Miller wanted his appointees to control the money while the legislature wanted control.<sup>144</sup> Governor Miller tried to limit the legislature's control over the money produced by the lottery by requiring that the program “be run by a seven-member board appointed by the governor and confirmed by the Senate.”<sup>145</sup> He was unsuccessful in gaining this control but the revised lottery bill received 126 votes in the House and 47 votes in the Senate, which allowed the amendment to be voted on by the people.<sup>146</sup> In 1992, the residents of Georgia ratified the lottery, and therefore pre-kindergarten, with 52% of the vote.<sup>147</sup>

Georgia's experience demonstrates the power of the governor, legislators, and institutional arrangements in the diffusion of policy. Across states, individuals who become inspired by specific policies or policy topics can become involved in the policy process. Furthermore, the Georgia case reveals that the adoption of every policy will not involve state party politics. Establishing the state lottery was a political fight across Georgia, however, the use of lottery money to create two education programs did not incite as intense ideological divisions

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<sup>143</sup> Jeanne Cummings, “Miller Programs Lack Support in House, Survey Finds,” *The Atlanta Journal Constitution*, January 13, 1991.

<sup>144</sup> Charles Walston, “Miller Would Let Legislature Control Lottery Money After All,” *The Atlanta Journal Constitution*, January 11, 1991.

<sup>145</sup> Charles Walston, “Miller Bill to Set Up Lottery Introduced but Not Complete,” *The Atlanta Journal Constitution*, February 6, 1992.

<sup>146</sup> Charles Walston, “Miller: Preschool needs lottery Gambling foes say Florida failing in education funding,” *The Atlanta Journal Constitution*, September 9, 1992; Charles Walston, “Voters to Decide Lottery in 1992; Senate Approves Measure 47-9,” *The Atlanta Journal Constitution*, February 9, 1991.

<sup>147</sup> Raden, 1999, pg. 13

within the state.<sup>148</sup> The controversy surrounding the adoption of the lottery and pre-kindergarten centered on who would be in control of the funding. The governor acted to consolidate his oversight over the new programs by trying to empower his appointees to control lottery funds while legislators argued that they should control funding. This indicates that elected officials in Georgia considered implementation dynamics during the adoption process.

### New York

Two years after Georgia adopted universal pre-kindergarten, New York adopted the same policy during a politically tumultuous time. The political battle was both between parties as well as between branches of government. As Bushouse notes, “How universal preschool came to be in New York has little, if anything, to do with preschool but everything to do with competition between branches of government to wield political power.”<sup>149</sup> The battle between the branches of government made the adoption of universal pre-kindergarten a visible political battle, which later extended into the implementation of pre-k.

The adoption of universal pre-k in New York is a combination of learning across states and bottom-up diffusion.<sup>150</sup> Mayor Koch in New York City first introduced the idea of universal pre-k in 1985. Eventually, the policy was no longer pursued because of low enrollment and “the primary reason cited for the low enrollment was a lack of capacity.”<sup>151</sup> However, Speaker Silver could have learned about the policy from Mayor Koch’s initiative as he “represents the 64<sup>th</sup> District in lower Manhattan and was familiar with the history of preschool in New York City.”<sup>152</sup> Speaker Silver could have also learned about the policy from a legislative breakfast held in

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<sup>148</sup> Raden, 1999.

<sup>149</sup> Bushouse, 2009, pg. 30.

<sup>150</sup> Please see Charles Shipan and Craig Volden, “The Mechanisms of Policy Diffusion,” *American Journal of Political Science* 52 (2008): 840-857 for a discussion of bottom-up diffusion.

<sup>151</sup> Bushouse, 2009, pg. 32.

<sup>152</sup> Bushouse, 2009, pg. 32.

February of 1997. In that meeting, “A speaker from the Georgia Business Education Roundtable spoke compellingly about the success of universal preschool in Georgia.”<sup>153</sup> The pre-k issues received further attention when Governor Pataki’s Lieutenant Governor “released a report...that proposed to expand the EPK program to reach all low-income four-year-olds and then all four-year-olds regardless of income.”<sup>154</sup>

New York State not only had momentum from New York City and Georgia, but the state itself and its bureaucracy also contributed to the momentum to adopt universal pre-kindergarten. In the 1980s, Governor Mario Cuomo was interested in improving early education in the state. And in 1987, Governor Mario Cuomo refocused the bureaucracy on early education issues when he “directed the Governor’s Council on Children and Families to work with the State Education Department and Department of Social Services and others to realize the goal. The Permanent Interagency Committee on Early Childhood Programs (PICECP) grew out of this proposal, but no new Pre-K program was developed.”<sup>155</sup> This established bureaucratic capacity and momentum for the state to learn about, develop, and implement early childhood education policies. The increased bureaucratic capacity may have also empowered bureaucrats to participate in learning from their own department’s and others’ innovations. In 1988 Governor Mario Cuomo was able to increase funding for New York’s state program, but was unable to establish universal pre-k.<sup>156</sup> Universal pre-kindergarten was adopted with the backdrop of prior pre-kindergarten proposals and bureaucratic reform surrounding early childhood education.

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<sup>153</sup> Anne Mitchell, “The State with Two Prekindergarten Programs: A Look at Prekindergarten Education in New York State (1928-2003),” Early Childhood Policy Research, June 2004, <http://nieer.org/resources/files/NYCaseStudy.pdf>, pg. 9-10.

<sup>154</sup> Mitchell, 2004, pg. 9.

<sup>155</sup> Mitchell, 2004, pg.9.

<sup>156</sup> Mitchell, 2004, pg. 9.

In 1997, because New York was doing well economically and the Speaker of the Assembly was focused on funding education reforms, New York was able to pass universal pre-kindergarten as part of the larger budget. The relationship among the bureaucracy, Governor George Pataki, and the legislature was tense as prior to 1997, because Governor Pataki had “proposed a constitutional amendment to eliminate the Board of Regents and make the State Education Department more accountable to the governor.”<sup>157</sup> During the budget battle in 1997, Governor Pataki was focused on cutting taxes while Speaker Silverman wanted to invest in different education reforms. One of the Speaker’s reforms was universal pre-kindergarten. Although the budget battle was political, both parties accepted universal pre-k because “both the Democrats and Republicans wanted to claim a victory prior to the 1998 election.”<sup>158</sup>

Not only was universal pre-k imbedded in a budget battle, it was also within a larger education reform package called LADDER which “contained a plan to establish Pre-k for all four-year-olds to be phased in over four years, beginning in the 1998-99 school year. The State Education Department (SED) was charged with administering the program.”<sup>159</sup> The plan was to grow LADDER over time so that by the year 2002 and with 500 million dollars, any and all four-year-olds could participate in pre-k.<sup>160</sup> In this way, the bureaucracy and its role in implementation were incorporated into the adoption considerations. The statute contained space for bureaucrats to make decisions relevant to expanding the reach of the policy.

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<sup>157</sup> Bushouse, 2009, pg. 33

<sup>158</sup> Ibid, 35.

<sup>159</sup> Citizens Budget Committee, “The Challenge of Making Universal Prekindergarten a Reality in New York State,” October 2013, [http://www.cbcny.org/sites/default/files/REPORT\\_UPK\\_10222013.pdf](http://www.cbcny.org/sites/default/files/REPORT_UPK_10222013.pdf), pg. 5.

<sup>160</sup> Citizens Budget Committee, 2013, pg. 5; Carl McCall, State Comptroller, “The 1997-98 Budget: Fiscal Review and Analysis,” New York State, September 1997. <http://www.osc.state.ny.us/reports/budget/1997/9-97.htm#education>.

However, the contentious politics surrounding the adoption of universal pre-k extended into its implementation. In the beginning, “New York State began by funding universal pre-kindergarten in the five largest cities...and planned to cover all students in all districts within five years. But legislators said that the program stalled after Gov. George E. Pataki backed away from an agreement to fully finance universal pre-kindergarten.”<sup>161</sup> Governor Pataki’s goal, in the budget battle, was to lower taxes, not to increase education funding. Therefore, unlike Speaker Silver, his priority was not to ensure the state adopted and implemented education reforms. However, the program was aided in 2007 “when Gov. Eliot Spitzer appointed a Children’s Cabinet made up of his executive staff and commissioners of state agencies to promote pre-K, along with children’s health insurance”<sup>162</sup> In this way, elected and unelected officials worked together in New York.

The case of New York State demonstrates three aspects of diffusion. First, the branches of government play an important role in the adopting policy and these conflicts can extend into expanding the reach of the policy. Although the governor and legislative branch were battling over the budget, their relationship had implications for universal pre-k. Second, this case also demonstrates that both parties were able to support universal pre-k as an election approached. However, Governor Pataki refused to support the policy financially when it was time to expand the reach of universal pre-k. Therefore, governors can play an important role in the expansion of policy reach. Third, the bureaucracy, bureaucratic reforms, and building bureaucratic capacity can also create momentum for the adoption and implementation of policy. These are aspects of internal implementation dynamics that affected universal pre-k in New York. And, although the

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<sup>161</sup> Winnie Hu, “A Promise of Pre-k for All is Still Far Off in New York,” *The New York Times*, August 22, 2008, [http://www.nytimes.com/2008/08/23/education/23prek.html?\\_r=0](http://www.nytimes.com/2008/08/23/education/23prek.html?_r=0).

<sup>162</sup> Hu, 2008.

PICECP was terminated before the 1997 legislative session, the bureaucracy still had exposure and experience in pre-k issues.

These dynamics in New York suggest that electoral, bureaucratic, inter-governmental, and implementation politics can all influence whether a state adopts a policy. Questions remain as to when and under what conditions these dynamics will systematically influence both the adoption and implementation of policy. In terms of electoral politics, does having a unified government support state actors as they try to adopt as well as implement policies? In terms of the bureaucracy, under what conditions will bureaucrats learn and influence the adoption of policy? Furthermore, when will bureaucrats promote or expand a diffusing policy after it is adopted? Examining the role of electoral politics and bureaucratic action in both the adoption and implementation of diffusing policies invites us to explore these questions.

### West Virginia

Both Oklahoma and West Virginia adopted universal pre-kindergarten without the government in fighting that characterized New York's experience. Oklahoma worked towards adopting universal pre-k as a part of a series of education reforms throughout the 1990s.<sup>163</sup> West Virginia's adoption of universal pre-k was not incremental, but it was under the radar. In fact, a few months before the legislature passed universal pre-kindergarten a newspaper article discussed West Virginia's lack of coordination across early education programs and stated that "West Virginia officials have no immediate plans to move toward universal public preschool like Georgia, New York and Oklahoma..."<sup>164</sup> However, West Virginia was focused on developing early childhood education in the state as the state created "a new division in the state Department

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<sup>163</sup> Bushouse, 2009, pg. 36.

<sup>164</sup> Carrie Smith, "Schools can Improve Study Says: Report Shows State Lacks Cohesion in Early Education," *The Charleston Daily Mail*, Jan 7, 2002.

of Education...to oversee the state's efforts in early childhood education.”<sup>165</sup> The adoption of universal pre-kindergarten was much less visible and more surprising than it was in either New York or Georgia. The adoption of universal pre-kindergarten in West Virginia also demonstrates the critical role unelected appointees can play in the adoption of policy.

West Virginia's adoption of universal pre-kindergarten was able to pass without a lot of attention because few people were involved in developing the policy. Universal pre-k was added to a larger education bill by Democratic state senator Lloyd Jackson.<sup>166</sup> One of the ways that Senator Jackson learned about universal pre-kindergarten was through the Southern Regional Education Board.<sup>167</sup> This policy was under the radar so much so that it seemed “abrupt and seemingly out of nowhere for all but a very small inner circle of legislators and political appointees.”<sup>168</sup> The political appointees involved in the adoption were from the West Virginia Department of Education and the Department of Health and Human Resources.<sup>169</sup> Their involvement was important for shaping the law as it gave the West Virginia Department of Health and Human Services “power of first review of all county preschool plans.”<sup>170</sup> Unelected officials were involved in the adoption of policy as well as shaping the policy for the benefit of their respective departments.

In working with high-level political appointees, other interested groups and street-level bureaucrats were not involved in the adoption of universal pre-k. As Bushouse (2009) notes, “the legislation was passed without the knowledge or involvement of early childhood advocates, civil servants responsible for implementing the program, and to the astonishment of the

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<sup>165</sup> Smith, 2002.

<sup>166</sup> Bushouse, 2009, pg. 47.

<sup>167</sup> Bushouse, 2009, pg. 51.

<sup>168</sup> Bushouse, 2009, pg. 48.

<sup>169</sup> Bushouse, 2009.

<sup>170</sup> Bushouse, 2009, pg. 48.

supporters of the Educare program, the preexisting early childhood program.”<sup>171</sup> In West Virginia, every interest group was left out of the conversation surrounding universal pre-kindergarten. The Educare program, which focused on all early childhood, was politically unstable due to the cost of expanding the program throughout the state. Senator Jackson preferred the idea of reaching all four-year-olds rather than serving a few children ages 0 to five.<sup>172</sup> Instead of including the unelected officials and interest groups working on and invested in the states’ current Educare program, Senator Jackson decided to work with top political appointees to devise the state’s new pre-kindergarten program. In doing so, Educare supporters were unable to influence the structure of the new program whereas top officials in the West Virginia Department of Education and Department of Health and Human Services were instrumental in designing the pre-k program. The development of the legislation was so insulated that the bill passed after “Senator Jackson wrote the legislation with three of his staff members, and lobbied key members of the Senate and House to ensure its passage at literally the 11<sup>th</sup> hour of the last day of the legislative session.”<sup>173</sup>

One of the House members that Senator Jackson had to work hard to convince was Jerry Mazzetesta who was also a Democrat. Mazzetesta did not want to use state funds to provide four-year-olds with preschool if it would limit the number of four-year-olds in Head Start, and therefore, limit the federal funds coming into the state. In fact, a year after universal pre-k was passed, Mazzetesta headed an effort to pass HB2402, which attempted to limit enrollment in preschool and require legislative approval for any increase in enrollment.<sup>174</sup> Demonstrating that

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<sup>171</sup> Ibid, 49.

<sup>172</sup> Bushouse, 2009, pg. 50.

<sup>173</sup> Bushouse, 2009, pg. 48.

<sup>174</sup> Dawn Miller, “House Bill Allows Public Preschool Counties Would Have to Get Permission to Add Students,” *The Charlestown Gazette*, January 25, 2003; Dawn Miller, “Learning to Share the PIECES

the politics surrounding diffusion does not end with the adoption of policy, Mazzetesta remained involved in early childhood education policy largely to unravel the law that Senator Jackson championed.

Although Mazzetesta, the Chairman of the House Education Committee, was opposed, Senator Lloyd was able to secure the support of the Speaker of the House, Robert Kiss. One way that Senator Lloyd was able to address concerns about state funding was because of the declining elementary and secondary education population in the state. Over the prior few years, there were fewer children to educate, opening up funds for the state to expand education access to four-year-olds.<sup>175</sup> The timeline in the law for the state to achieve universal pre-k was 2012 and by 2012 the state enrolled sixty-two percent of its four-year-olds in pre-k.<sup>176</sup>

The involvement of political appointees had lasting consequences for the implementation of the program. The Department of Health and Human Resources and the Department of Education had to work together to establish the program. This was important as “the civil servants charged with spearheading development of the new program were well respected in the early childhood community, had experience, and, very importantly, were able to function effectively as a team.”<sup>177</sup> Even with respect and expertise, bureaucrats in West Virginia depended upon New York and Georgia as they began implementing the program and establishing requirements. As Bushouse (2009) notes “To help design the program, representatives from state agencies in New York and Georgia were brought in to discuss their

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Education, Child-Care Pros Work Together on Universal Preschool,” *The Charlestown Gazette*, January 19, 2003.

<sup>175</sup> Bushouse, 2009.

<sup>176</sup> Bushouse, 2009; Barnett et al., 2012.

<sup>177</sup> Bushouse, 2009, pg. 88.

preschool programs.”<sup>178</sup> Policy learning by different actors was an important aspect of West Virginia’s adoption and implementation of universal pre-kindergarten.

West Virginia’s adoption of universal pre-k exemplifies three aspects of diffusion. First, it demonstrates that unelected state officials can be active in the adoption of policy. Unelected officials, such as political appointees, can bring their learning to influence policy adoption. Second, West Virginia learned from Georgia in its attempts to improve its education system. West Virginia focused on both higher education scholarships and early education services like Georgia. One editorial noted that “Both Educare and the Promise scholarship were inspired in part by Georgia’s ‘bookends approach’ to education” and that “a state official from the Georgia pre-kindergarten program visited West Virginia when Educare was being unveiled.”<sup>179</sup>

Bureaucrats in West Virginia continued to participate in learning by drawing on the experiences of New York and Georgia as they established requirements for the program.

Third, the West Virginia story demonstrates that the politics of adoption has consequences for implementation. The opposition of Mazzetesta did not end with adoption and after the policy was adopted he worked to limit the reach of the policy. Other aspects of the adoption process influenced the reach of policy. In working with the Department of Human Resources and Head Start to ensure support, the final legislation required that these two entities approve school plans in order for the districts to receive the state money.<sup>180</sup> Other aspects of the legislation, such as collaboration requirements and the involvement of multiple agencies, also influenced implementation. In 2014, seventy-nine percent of the classrooms collaborated with

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<sup>178</sup> Bushouse, 2009, pg. 89.

<sup>179</sup> Julie Pratt, “Derailing Educare Funding for Early Education Programs Should be Restored,” *The Charleston Gazette*, April 19, 2002. Educare is not the universal pre-kindergarten system but a different early childhood education program.

<sup>180</sup> Bushouse, 2009.

other entities such as Head Start.<sup>181</sup> These decisions have consequences for the implementation of universal pre-kindergarten. School districts had to be open to collaboration to receive pre-kindergarten funds and bureaucrats across agencies had to work together to implement the program. In this way, internal implementation concerns influenced the adoption of universal pre-kindergarten.

Although governments have been involved in prekindergarten education since Head Start was established, the policy of universal pre-kindergarten originated in the states. States have adopted this policy of their own accord, without incentives from the federal government. Since 1995, the policy of providing the opportunity for any and all four-year-olds to attend pre-k has spread to nine states. The cases of Georgia, New York, and West Virginia demonstrate that bureaucrats can be involved in policy adoption, that internal implementation dynamics matter for adoption, and that electoral politics does not end with adoption. The cases also suggest that the politics of adoption can influence the implementation of policy because elected officials who adopted the policy tried to limit the reach of policy during implementation. The next sections of the chapter explore the broader diffusion pattern of universal pre-kindergarten.

#### How and Why Did Universal Pre-k Diffuse?

In focusing on the politics of adoption, the diffusion literature has focused on the electoral consequences of adopting policy and has failed to assess the role of implementation dynamics, bureaucrats, and the relationships among elected and unelected officials in the government, something that implementation studies take very seriously. The West Virginia case also demonstrates that politics can determine interest group access during the adoption of policy. Interest groups in Georgia and New York had more opportunities to influence adoption because

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<sup>181</sup> West Virginia Department of Early Learning, “Overview of West Virginia’s Pre-k: WVBE Policy 2525 West Virginia’s Universal Access to a Quality Early Education System,” West Virginia Early Care and Education, 2014-2015, <https://wvde.state.wv.us/oel/docs/wv-prek-overview.pdf>.

the process was generally open and public. In West Virginia, interest groups and even existing state-funded early education programs were not included in the passage of universal pre-kindergarten because only select people were involved in the process. Instead, political appointees were critical actors. These cases demonstrate that the diffusion of universal pre-k was political and influenced by networks like the Southern Regional Education Board, but that unelected bureaucratic actors also have a place in the diffusion of policy.

To discover the more general pattern of how and why this policy has spread across states, I have constructed an original dataset for the years 1995- 2014 from all 50 states. Background information on state universal pre-kindergarten policies was gathered from the National Institution of Early Education Research (NIEER) at Rutgers University. NIEER has published 12 annual The State of Preschool Yearbooks since 2003. This yearbook provides a profile on each state's preschool program and policy as well as compares preschool access and quality across states. Other data has been collected from the Book of States and the U.S. Census. Table 2.2 details the sources for the data. Data on all 50 states across this large time span allows this dissertation to speak to how constituency characteristics, elected and bureaucratic officials, geographic proximity, and state capacity contributed to the spread of this policy.

Table 2.2: Data Sources for Variables

| Variables                            | Sources                                                                 | Dates Available      | Measurement                                                                                                                                                                                                                              |
|--------------------------------------|-------------------------------------------------------------------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Political Variables</i>           |                                                                         |                      |                                                                                                                                                                                                                                          |
| Unified Democratic Government        | Ballotpedia/National Council of State Legislatures                      | 1993-2014            | 1=Unified Democratic Government, 0= Divided or Unified Republican Government                                                                                                                                                             |
| Legislative Professionalism          | Squire (2007)                                                           | 1996/2003            | Composite measure developed in Squire 2007 consisting of salary and benefits, time demands of service, and staff and resources.                                                                                                          |
| Election Year                        | Ballotpedia                                                             | 1990-2014            | 1= Election Year. Self-created variable.                                                                                                                                                                                                 |
| Non-Election Year                    | Ballotpedia                                                             | 1990-2014            | 1= Third and Fourth Year after an Election. Self-created variable.                                                                                                                                                                       |
| <i>State Characteristics</i>         |                                                                         |                      |                                                                                                                                                                                                                                          |
| % of Residents with Bachelors Degree | U.S. Census and American Fact Finder                                    | 1990-2014            | Percent of persons 25 years and over that have completed 4 years of college or more                                                                                                                                                      |
| <i>Interest Groups</i>               |                                                                         |                      |                                                                                                                                                                                                                                          |
| Membership in Public Union           | UnionStats.com                                                          | 1990-2014            | Percentage of members in a public union                                                                                                                                                                                                  |
| <i>Geographic Proximity</i>          |                                                                         |                      |                                                                                                                                                                                                                                          |
| # of States in Region with UPK       | U.S. Census Regions and National Institute for Early Education Research | 1990-2014            | 1= one state in the region has adopted universal pre-k; 2= two states in the region have adopted universal pre-k; 3= three states in the region have adopted universal pre-k; 4= four states in the region have adopted universal pre-k. |
| <i>Implementation Variables</i>      |                                                                         |                      |                                                                                                                                                                                                                                          |
| Education Bureaucracy                | US Census Government Employment and Payroll                             | 1992-1995, 1997-2014 | The number of "Other Education" employees in the state                                                                                                                                                                                   |
| Bureaucratic Expertise               | NIEER                                                                   | 2005-2014            | The number of years it took to develop early childhood standards in relation to 2002.                                                                                                                                                    |
| Logged General Revenue               | U.S. Census                                                             | 1990-2014            | A state's general revenue in thousands                                                                                                                                                                                                   |

In following Berry and Berry (1990), I use Event History Analysis (EHA) to explain the diffusion of universal pre-k over time. The most appropriate model for this data is the Cox Proportional Hazards model, which allows the incorporation of time-varying covariates while also refraining from making assumptions about the shape of the baseline hazard. Due to the failure rate (18%), over specification of the model is possible. Because of this issue, I could not

include every independent variable that commonly appears in diffusion studies. To account for this issue, I chose to include the independent variables that were most theoretically appropriate.

This chapter presents two initial models to assess the spread of universal pre-kindergarten across states. The first model is the traditional diffusion model, which includes independent variables discussed in the policy diffusion literature. The second model builds upon the first model by incorporating internal implementation dynamics and bureaucratic politics into the model. This model assesses how implementation considerations and bureaucrats can structure the diffusion of policy. However, the dissertation also asks how out-of-state implementation matters for the pace and pattern of policy adoption. The model in Chapter 4 presents the third and full model of the diffusion of universal pre-kindergarten policy by including out-of-state implementation. Therefore, the two models in this chapter are not the final models but begin to assess how bureaucrats can influence how and whether states act as laboratories of bureaucracy.

I include five political variables to assess the role of internal state politics on the diffusion process. The measures I include are:

- Unified Democratic Government
- Legislative Professionalism
- Election Timing
- Public Union Membership

I include a measure of whether a state is under unified Democratic government because Democrats should be more supportive of a universal policy that expands the role of government in the state. Elected officials are essential to diffusion because they use networks to learn about and spread policy ideas, direct implementation of policies, and sometimes adopt the policies themselves. However, legislators and governors act within institutional structures during both adoption and implementation. Government relationships do not only exist once the state implements policy, they are present and influential during adoption as well. It can be riskier for

Democratic legislators to adopt a policy if they know that the Republican governor will veto the legislation. Therefore, policy adoption is not necessarily about government ideology or the percentage of Republicans in the legislature, but can be about unified party control of state governments. Democratically controlled governments with liberal ideologies may have more opportunity to adopt liberal policies that are diffusing across the U.S. states than a divided or Republican controlled state. Unified party control can be critical for adoption both through ideological interest in adopting a policy as well as through the way that this institutional arrangement creates opportunities for actors to adopt the policy.

Following the diffusion literature, I include Squire's (2007) measure of legislative professionalism, election year dummy variables, and the percentage of public employees in unions. Legislative professionalism is used as a measure of legislative capacity for participating in policy learning and diffusion.<sup>182</sup> The professionalization of the state legislature is relatively stable through the years. Therefore, I use the 1996 measure for state legislatures in years 1995-1999 and the 2003 measure for years 2000-2014. Teachers' unions should be the most prominent interest group involved in the diffusion of education policies and make up a large portion of public employees. I include a measure of public union membership to assess the role of teachers' unions. I also include the measure of policy learning in the diffusion studies, the role of geographic proximity in the adoption of policy.<sup>183</sup> I use the NIEER's list of states with universal pre-k and the four major U.S. Census regions to assign each state a 1 if a state in its region had adopted universal pre-k. Table 2.3 presents the descriptive statistics for the variables in the model.

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<sup>182</sup> Charles R. Shipan and Craig Volden, "Policy Diffusion: Seven Lessons for Scholars and Practitioners," *Public Administration Review*, 72 (2012):788-796.

<sup>183</sup> Please see Walker, 1969; Shipan and Volden, 2008; and Volden, 2006. Measure of geographic proximity can be measured in other ways as well including proportion of neighbors, whether a neighbor has adopted a policy, among others.

Table 2.3: Descriptive Statistics for Diffusion Model of All States 1995-2014

|                                                                  | Mean or % | St. Dev. | Min. | Max. |
|------------------------------------------------------------------|-----------|----------|------|------|
| <b>Independent Variables</b>                                     |           |          |      |      |
| <i>Political Variables</i>                                       |           |          |      |      |
| Unified Democratic Government (1= Unified Democratic Government) | 18.11     |          |      |      |
| Legislative Professionalism                                      | 17.65     | 11.19    | 2.7  | 62.6 |
| Election Year (1= Election Year)                                 | 26        |          |      |      |
| Non-Election Year (1= Third and Fourth Year after an Election)   | 47.56     |          |      |      |
| Public Union Membership                                          | 33.03     | 17.46    | 2.7  | 73.1 |
| <i>State Characteristics</i>                                     |           |          |      |      |
| % of Residents with Bachelors Degree                             | 25.71     | 4.93     | 11.4 | 38.7 |
| <i>Geographic Proximity</i>                                      |           |          |      |      |
| No State in Region as Universal Pre-k                            | 45.89     |          |      |      |
| One State in Region has Universal Pre-k                          | 13.67     |          |      |      |
| Two States in Region has Universal Pre-k                         | 22.33     |          |      |      |
| Three States in Region has Universal Pre-k                       | 0.78      |          |      |      |
| Four State in Region has Universal Pre-k                         | 17.33     |          |      |      |
| <i>Implementation Variables</i>                                  |           |          |      |      |
| Size of the Education Bureaucracy                                | 1640.55   | 1294.24  | 74   | 6603 |
| Bureaucratic Expertise                                           | 9.73      | 4.075    | 0    | 27   |
| Logged General Revenue                                           | 7.14      | 0.41     | 6.25 | 8.34 |

I include a state characteristic measure as well. State characteristics can structure diffusion because they can determine the electoral pressures and consequences for elected officials when they adopt policy.<sup>184</sup> Only state characteristics that are relevant to the policy and the target population are critical for the adoption process.<sup>185</sup> In terms of education policy, education levels in the state may affect adoption. More educated residents may be more likely to

<sup>184</sup> Berry and Berry, 1990.

<sup>185</sup> Beyond the size of the target group, the social construction of the target group is also important. Schneider and Ingram argue that the target population is important for policy design, but do not extend their argument to implementation. But, if “Social constructions become embedded in policy as messages that are absorbed by citizens and affect their orientations and participation patterns”(334), then the social construction of the target population in the design stage can impact how and whether the target group supports or opposes a policy in the implementation process. See Ann Schneider and Helen Ingram, “Social Construction of Target Populations: Implications for Politics and Policy,” *American Political Science Review* 87 (1993): 334-347.

be more supportive of state investment in education because the value they place on education. Just as more educated residents can provide electoral support or electoral cover for elected officials, more educated residents can also provide more support for the bureaucracy as it takes steps to implement a policy. I have included a measure of educational attainment because more educated residents could be more supportive of pre-k.<sup>186</sup> Table 2.4 summarizes the expected directions of the variables.

Table 2.4: Summary of Expected Direction of Variables

| Variable Name                             | Measures                              | Expected Direction | Literature                                                                                                                                 |
|-------------------------------------------|---------------------------------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Unified Democratic Government             | Party Politics                        | +                  | see Berry and Berry 1990; Grossback, Nicholson-Crotty, and Peterson 2004; Volden, 2006, Shipan and Volden, 2006 and Shipan and Volden 2008 |
| Legislative Professionalism               | Propensity to Learn                   | +                  | Shipan and Volden, 2012                                                                                                                    |
| # of States in Region has Universal Pre-k | Policy Learning                       | +                  | see Shipan and Volden 2008; Volden, 2006; Walker, 1969                                                                                     |
| Size of the Education Bureaucracy         | Bureaucratic Influence                | +                  | see Rourke 1984; Carpenter 2001; Teodoro 2009                                                                                              |
| Bureaucratic Expertise                    | Bureaucratic Learning                 | +                  | Original to the Dissertation                                                                                                               |
| Election Year/Non-Election Year           | Electoral Timing                      | Control            | see Berry and Berry 1990; Boushey 2016                                                                                                     |
| % of Residents with Bachelor's Degree     | State Characteristics                 | Control            | see Berry and Berry 1990; Grossback, Nicholson-Crotty, Peterson 2004; Hero and Preuhs 2007; Shipan and Volden 2006                         |
| Membership in Public Union                | Interest Group Involvement            | Control            | see Keiser and Miller 2010; Thompson and Scicchitano 1985; Williams and Matheny 1984                                                       |
| Logged General Revenue                    | Fiscal Capacity/State Characteristics | Control            | see Berry and Berry 1990; Grossback, Nicholson-Crotty, Peterson 2004; Hero and Preuhs 2007; Shipan and Volden 2006                         |

I include three implementation variables including the number of “Other” education employees in the state (lagged),<sup>187</sup> the time it took states to adopt early learning standards (expertise), and the logged general revenue in the state (fiscal capacity). Larger bureaucracies in

<sup>186</sup> Because elected officials and bureaucrats will be unaware of this data until it is released, state characteristics are lagged by one year.

<sup>187</sup> The U.S. Census did not have this data available for 1996. I averaged the data for 1995 and 1997 to impute data for 1996.

early education have the potential to have a significant influence on the adoption of policy. There are more people to influence legislators, more bureaucrats who can gather information, and potentially more influence due to size. Many states, such as Georgia and Florida, had adopted targeted pre-k programs before adopting universal pre-kindergarten. Therefore, bureaucrats should be in favor of this policy because it expands their role and influence in the state. It further cements their department or office in the institutional structure of government.

President George W. Bush's Good Start, Grow Smart initiative in 2002 was an impetus for states to create early learning standards. The bureaucratic expertise variable measures the number of years it took states to adopt standards in comparison to the Good Start, Grow Smart initiative. I subtracted 2002 from the year the state adopted standards. Then I added 16 so that the variable would be positive and range from 0 to 27. Then, I recoded the variable so that the last state to adopt standards received a 0.<sup>188</sup> Table 3.5 displays the results of the Cox model on the adoption of universal pre-kindergarten across all 50 states and from 1995 to 2014.

### Bureaucracy

The Cox Hazards model is the appropriate method to use in my model and the results provide new insights into the actors involved in policy diffusion. Model 1B indicates that bureaucrats themselves structure adoption. The size of the education bureaucracy increases the likelihood of adoption.<sup>189</sup> A state department with 1,000 more education bureaucrats is 2 percent more likely to adopt universal pre-kindergarten. This seems small, but the standard deviation of the size of the education bureaucracy is about 1,200 employees. This model

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<sup>188</sup> When this is coded as a dichotomous variable with 1= state adopted early childhood standards, the variable is not statistically significant.

<sup>189</sup> In Chapter 5 I use the under 5 population to estimate enrollment rates prior to the NIEER data that is available beginning in the 2001-2002 school year. Because the Chapter 5 model builds off the models in this chapter, I am unable to use the relative measure of "other" bureaucrats as a portion of the population.

suggests that the amount of bureaucrats within a state department can be influential in whether states adopt diffusing policies.

In addition to bureaucrats, legislative professionalism is also structuring diffusion. Legislative professionalism is included in diffusion research because it helps the mechanism of learning to occur. Legislative professionalism is a measure that consists of salaries and benefits, time demands, and staff resources available to legislators. More professional legislatures are considered to have more legislative capacity in order to learn from other states and adopt policies.<sup>190</sup> The model suggests every one-unit increase in professionalism is associated with a state being thirteen percent more likely to adopt universal pre-k. However, incorporating implementation into diffusion reveals that unelected officials are important state actors in policy diffusion as well.

Although elected officials oftentimes introduce policies and adopt the laws, bureaucratic expertise bears on policy adoption. As West Virginia's experience demonstrates, legislators worked closely with top political appointees in two different departments to adopt universal pre-kindergarten. The bureaucrats involved in the implementation of the policy were considered to be well respected and experienced in their areas.<sup>191</sup> The speed with which state bureaucracies were able to develop and adopt early learning standards is indicative of their expertise. States that were able to develop and adopt early learning standards more quickly are twenty-three percent more likely to adopt universal pre-kindergarten. This suggests that bureaucrats and their level of expertise are relevant for whether states adopt policies.

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<sup>190</sup> Shipan and Volden, 2012.

<sup>191</sup> Bushouse, 2009, pg. 89.

Table 2.5: Cox Proportional Hazards Model of the Diffusion of Universal Pre-k of all Fifty States from 1995-2014<sup>192</sup>

|                                          | Model 1A         |                  | Model 1B             |                          |
|------------------------------------------|------------------|------------------|----------------------|--------------------------|
|                                          | Coeff.           | Hazard           | Coeff.               | Hazard                   |
| <b>Independent Variables</b>             |                  |                  |                      |                          |
| <i>Traditional Diffusion Variables</i>   |                  |                  |                      |                          |
| Unified Democratic Government            | 1.78**<br>(0.87) | 5.92**<br>(5.12) | 2.06**<br>(0.84)     | 7.85**<br>(6.61)         |
| Legislative Professionalism              | 0.02<br>(0.02)   | 1.02<br>(0.02)   | 0.12*<br>(0.07)      | 1.13*<br>(0.08)          |
| Election Year                            | 0.38<br>(0.80)   | 1.46<br>(1.17)   | 0.75<br>(0.83)       | 2.12<br>(1.75)           |
| Non-Election Year                        | -0.28<br>(0.86)  | 0.76<br>(0.65)   | 0.24<br>(0.97)       | 1.27<br>(1.23)           |
| Public Union Membership                  | 0.01<br>(0.03)   | 1.01<br>(0.03)   | 0.01<br>(0.03)       | 1.01<br>(0.03)           |
| % of Residents with Bachelor's Degree    | -0.14<br>(0.13)  | 0.87<br>(0.11)   | -0.12<br>(0.15)      | 0.89<br>(0.13)           |
| # of States in the Region with UPK       | -0.26<br>(0.23)  | 0.77<br>(0.18)   | -0.46<br>(0.30)      | 0.63<br>(0.19)           |
| <i>Internal Implementation Variables</i> |                  |                  |                      |                          |
| Size of Education Bureaucracy            |                  |                  | 0.002***<br>(0.0004) | 1.002**<br>*<br>(0.0005) |
| Bureaucratic Expertise                   |                  |                  | 0.21**<br>(0.09)     | 1.23**<br>(0.11)         |
| Logged General Revenue                   |                  |                  | -7.26***<br>(2.78)   | 0.001**<br>*<br>(0.002)  |
| Observations                             | 900              |                  | 900                  |                          |
| Log Psuedolikelihood                     | -49.068806       |                  | 39.868258            |                          |
| Wald Chi2 (7)                            | 13.48            |                  |                      |                          |
| Wald Chi2 (10)                           |                  |                  | 32.86                |                          |
| Wald Chi2 (12)                           |                  |                  |                      |                          |
| Prob > Chi2                              | 0.0612           |                  | 0.0003               |                          |

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; Standard errors are clustered by state; Reference categories: divided or Republican controlled government, non-election year, election year or the year after, state in region does not have universal pre-k,

<sup>192</sup> For graphs of the models in this dissertation, please refer to Appendix A, B, and C.

state does not have early childhood education standards, other actors appoint chief education official.

This analysis indicates that when we incorporate implementation into diffusion we have different expectations as to who can influence the adoption of policy. These expectations are confirmed in Model 1B. It is apparent that bureaucrats and bureaucratic expertise, in addition to electoral politics, are important for diffusion. Incorporating implementation into diffusion reveals that variables that are traditionally used by implementation scholars can bear on the adoption of diffusing policies. This changes how we think about diffusion by considering the ways in which unelected actors may influence the pace and pattern of diffusion.

### Elected Officials

Diffusion scholars emphasize the influence of electoral politics on the adoption of policy while implementation scholars focus on hierarchical control and institutional relationships in determining compliance. Elected officials contribute to states as laboratories of democracy by learning about policies in other states and adopting the most appropriate policy for their constituents. In incorporating implementation into diffusion, we expect that the institutional structure in which elected officials act will influence diffusion by affecting adoption and implementation. State legislators and governors can experience institutional constraints and electoral benefits when taking action to support or oppose the adoption of policy.<sup>193</sup> Therefore, whether the state has unified party control may be more important for diffusion than the percentage of Republicans in the legislature or the government ideology score. States with

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<sup>193</sup> Patricia K. Freeman, "Interstate Communication among State Legislators regarding Energy Policy Innovation," *Publius* 15 (1985): 99-111; Kathleen Hale, *How Information Matters: Networks and Public Policy Innovation* (Washington D.C.: Georgetown University Press, 2011); Elizabeth Rigby and Gerald C. Wright, "Political Parties and Representation of the Poor in the American States," *American Journal of Political Science* 57 (2013): 552-565; Jeffrey R. Lax and Justin H. Phillips, "The Democratic Deficit in the States," *American Journal of Political Science* 56 (2012): 148-166.

Democratic legislatures and governors will be more likely to adopt more traditional liberal policies.

My analysis of the Cox Proportional Hazard model confirms that states that are controlled by Democrats, compared to divided governments or Republican controlled governments, are almost eight times more likely to adopt universal pre-kindergarten. As demonstrated with the Georgia case, the ability of the branches to work together is critical for the adoption of universal pre-k. Therefore, it is not that Democratic legislatures are more likely to adopt liberal policies per se, but that states with a unified Democratic government have the opportunity and institutional support to adopt more liberal policies. This is consistent with expectations that the institutional environment that elected officials find themselves in can determine diffusion.

Election year variables are often included in diffusion research because they measure potential electoral influences on the adoption of policy. For example, the timing of when the governor is elected can predict adoption of policy.<sup>194</sup> I have used two dummy variables to measure the influence of election timing. The first election variable indicates whether a gubernatorial election was held that year. Following Berry and Berry (1990) and Graeme Boushey (2016), I have also included a dummy variable whereby every year, except the election year and the year after the election, is coded as one.<sup>195</sup> I expect that a state is more likely to adopt universal pre-k, a policy that extends a benefit to a large population, during an election year. As the New York case demonstrated, Democrats and Republicans were able to agree to universal pre-k because of the upcoming election. However, the gubernatorial election cycle has

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<sup>194</sup> Frances Stokes Berry, "Innovation in Public Management: The Adoption of Strategic Planning," *Public Administration Review* 54 (1994): 322-330.

<sup>195</sup> Berry and Berry, 1990; See Graeme Boushey, "Targeted for Diffusion? How the Use and Acceptance of Stereotypes Shape the Diffusion of Criminal Justice Policy Innovations in the American States," *American Political Science Review* 110 (2016): 198-214.

no significant impact on the adoption of universal pre-k. This might be because the policy of universal pre-k was bundled in other, larger policies. Both West Virginia and New York added their universal pre-k programs to more comprehensive education policies. Although the adoption of a universal pre-k program might help an elected official's re-election chances, the other education policies within the bill might overshadow the influence of universal pre-k on re-election.

### Interest Groups

Interest groups can influence the diffusion process because they can spread information about new policies and they can also support or oppose policies within their state. A teachers' union is a group that may have a strong interest in making pre-k universal. In an era of standards, it is favorable to teachers' unions to have kindergarteners arrive at school ready to learn on their first day. Having access to pre-kindergarten may help children become ready for school when they enter the public school system. However, my analysis of the Cox Proportional Hazard model does not confirm the role of the teachers' union in the adoption of universal pre-k.

Teachers' unions, whether supporting universal pre-k or not, might choose to dedicate their resources to issues plaguing the elementary and secondary school system rather than early childhood education issues. Furthermore, the absence of teachers' unions during adoption does not preclude their involvement implementation. This analysis would indicate that teachers' unions are not part of the story of the adoption of universal pre-k, but they may be part of the implementation of universal pre-kindergarten programs.<sup>196</sup>

### State Characteristics

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<sup>196</sup> Due to data limitations I am unable to assess the role of pre-k teachers or pre-k interest groups in the adoption of universal pre-kindergarten. Pre-kindergarten teachers are not necessarily part of teachers' unions. Pre-kindergarten teachers and elementary teachers, represented by unions, may have opposing interests.

As discussed in Chapter 1, state characteristics can influence adoption by affecting policy learning and structuring the electoral consequences of adoption. The constituency characteristic that is relevant for the adoption of an expensive education policy is the education level of the state's residents. Residents with higher levels of education may be more likely to value education because of the time and resources they have devoted to their own education. Therefore, elected officials may be more likely to find support for the adoption of education policies when they have more educated residents. However, the regression does not support the role of state education characteristics in the diffusion of universal pre-k. Other state characteristics might play a more critical role in the diffusion of pre-kindergarten policy.<sup>197</sup>

#### Geographic Proximity

Jack Walker first described the importance of geographic proximity in the spread of innovations in 1969.<sup>198</sup> This dynamic was further explored by Berry and Berry (1990).<sup>199</sup> States can learn about policies from their neighboring states and this limits the risks of adopting new policies. Although the case studies support that New York and West Virginia learned about universal pre-k from Georgia, the geographic proximity variable in the model does not reach statistical significance. Therefore, states are not more likely to adopt universal pre-k if a state in the region has already adopted universal pre-k. Although states can look to neighbors and regional states to learn about policy, they can also look to states in other regions of the country. This result is in agreement with recent concerns about the geographic clustering of policies.

Increases in technology and globalization have expanded the sources governments can draw on

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<sup>197</sup> I was unable to include other state characteristics in the model because of concerns of over-specification of the model. Unfortunately, the cost of childcare within each state and during each year is unavailable. I also ran the model with the percent of women in the workforce. There is not a statistically significant relationship between the percent of women in the workforce and adoption of universal pre-kindergarten. These models are in Appendix C.

<sup>198</sup> Walker, 1969.

<sup>199</sup> Berry and Berry, 1990.

to learn about policies. Geographic clustering has even recently been seen as ‘outdated’.<sup>200</sup>

However, Chapter 4, which presents the full diffusion model, demonstrates how geographic proximity, through out-of-state implementation, shapes diffusion.

### Conclusion

This chapter has utilized the traditional diffusion model, a Cox Proportional Hazard model, to explain the spread of universal pre-kindergarten. The analysis reveals that traditional diffusion variables such as the election cycle, state characteristics, and geographic proximity do not explain the diffusion of universal pre-k. This is likely due to the pro-innovation bias in the field. As Karch et al (2016) demonstrate policy diffusion research has largely studied policies that have been widely adopted. In doing so, some of the traditional diffusion findings are inaccurate. When correcting for the pro-innovation bias, the authors find that a measure of a state’s college educated population becomes less significant and that geographic proximity and policy attributes are less predictive.<sup>201</sup> Studying universal pre-kindergarten also corrects for the literature’s pro-innovation bias and the results likely reflect that correction.

Conventional scholarship has omitted the role of bureaucrats and internal implementation considerations in the adoption of policy. This analysis suggests bureaucrats and bureaucratic expertise influence whether states adopt policies, in addition to electoral politics. Bureaucrats, as well as elected officials, can participate in policy learning and use that learning to affect the adoption of policy within a state. Diffusion scholarship has centered on the action of elected

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<sup>200</sup> Please see Shipan and Volden 2012 for a discussion on the problems with geographic clustering and policy diffusion. Charles Shipan and Craig Volden, “Policy Diffusion: Seven Lessons for Scholars and Practicioners,” *Public Administration Review* 72 (2012): 789.

<sup>201</sup> Andrew Karch, Sean C. Nicholson-Crotty, Neal D. Woodsand, and Ann O’M Bowman, “Policy Diffusion and the Pro-Innovation Bias,” *Political Research Quarterly*, 69 (2016): 83-95.

officials. In doing so, scholarship has overlooked how unelected officials are shaping our laboratories of democracy.

Incorporating implementation into diffusion also means exploring why states implement the same policies differently. This is important for incorporating implementation into diffusion because we need to understand why states implement the same policies differently and how those differences, in turn, bear on the subsequent adoption of policy. Elected and unelected officials should learn from other states' implementation to determine whether they should adopt the policy in their own state.

Studying the implementation of diffusing policies can also expand our understanding of implementation in two ways. First, traditional studies of diffusion demonstrate that out-of-state politics affects policy adoption. In thinking about the implementation of diffusion policies, in the next chapter I ask whether out-of-state politics bears on policy implementation. Out-of-state politics might be structuring diffusion by influencing implementation. This may occur because bureaucrats can learn from policy adoptions in other states and innovate within their own agencies to achieve similar policy outcomes.

Second, diffusion scholarship emphasizes the role of internal electoral politics. In the next chapter I also consider how electoral politics continues to bear on implementation. As the New York and Georgia cases demonstrate, elected officials who were opposed to universal pre-kindergarten continued to undercut the policy after it was adopted. Because the diffusion literature stops at the moment of adoption, the role of bureaucrats in the adoption of policy and the role of electoral politics on implementation remains unclear. The next chapter goes beyond our current understanding of diffusion by looking at what happens in states after they have adopted the same policy. Incorporating implementation into diffusion means explaining why

states adopt the same policy, why they implement them differently, and how those differences affect adoption. It also involves assessing the role of bureaucrats in shaping implementation and how this contributes to states as laboratories of bureaucracy. Chapter 3 will explore why states implement policies differently and how out-of-state politics can affect implementation. Chapter 4 will then explore how differences in implementation influence diffusion and the role of bureaucratic learning in the diffusion process.

## CHAPTER 3: THE IMPLEMENTATION OF DIFFUSING POLICIES

### Introduction

State policymaking is a dynamic process with elected and unelected officials making important adoption and implementation decisions that shape policies in their state. Tennessee has recently adopted a new pre-kindergarten policy after a Vanderbilt University study of the state's pre-kindergarten program revealed weaknesses in the program. Researchers at Vanderbilt University conducted an extensive study of the state's pre-kindergarten program and found that most of the benefits of participating in the state's pre-kindergarten program disappeared by third grade.<sup>202</sup> The Tennessee legislature has tried to address issues with the state pre-kindergarten program by passing legislation to ensure state pre-kindergarten classrooms are high quality.<sup>203</sup> When I asked about one legislator's role in implementing this new pre-kindergarten policy he noted "my role has really been to allow the state department of education to promulgate the rules." He continued on to say "the legislative branch gives the framework or the direction or the permission for the executive branch to execute the law. The state department of education in collaboration with the school districts is putting together what we call the parameters for high quality pre-k."<sup>204</sup>

The implementation of the policy described above is in its beginning stages. However, it suggests that the Tennessee Department of Education has space to make decisions that direct the implementation of the policy in the state. As with other state legislation, many decisions can be

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<sup>202</sup> See Mark W. Lipsey, Dale C. Farran, and Kerry G. Hofer, "A Randomized Control Trial of a Statewide Voluntary Prekindergarten Program on Children's Skills and Behaviors Through the Third Grade," Peabody Research Institute, September 2015, [https://my.vanderbilt.edu/tnprekevaluation/files/2013/10/VPKthrough3rd\\_final\\_withcover.pdf](https://my.vanderbilt.edu/tnprekevaluation/files/2013/10/VPKthrough3rd_final_withcover.pdf), accessed January 31, 2017.

<sup>203</sup> Jason Gonzales, "Tennessee Legislature Approves Bill to Improve Pre-k," *The Tennessean*, March 22, 2016, <http://www.tennessean.com/story/news/education/2016/03/22/tennessee-legislature-approves-bill-improve-pre-k/82112794/>, accessed March 23, 2017.

<sup>204</sup> Respondent in the legislature interviewed by Kelly Smith, interview number 9, via phone in August 2016.

made during the implementation process. This reflects Eric Patashnik's argument that "By itself, however, the passage of a reform act does not settle *anything*."<sup>205</sup> Considering state implementation leads to a host of questions such as: When implementation is a dynamic process, but states have adopted the same policies, do they implement them in the same way? If not, why do states implement the same policies differently? And how does policymaking in other states bear on implementation within and across states? Does the mechanism of policy learning affect implementation? This chapter addresses these questions by using the lens of diffusion to study the implementation of state pre-kindergarten policies. The previous chapter demonstrated that, in addition to elected officials, bureaucrats and bureaucratic politics influence the adoption of policy. Considering how implementation bears on adoption and how adoption bears on implementation changes the actors we consider crucial in the state policymaking process.

This chapter uses the lens of diffusion to consider three previously ignored effects on state implementation. First, one of the main arguments in diffusion scholarship is that out-of-state politics affects the policy politics within states. The role of out-of-state politics on state policymaking, considered by diffusion studies, has not been central to the bureaucracy and implementation literatures. Second, policy learning occurs at the implementation stage as well as the adoption stage. However, during implementation, the main actors involved in learning are bureaucrats. Bureaucrats learn from other states' policy experiments and use those lessons in implementing policy within their own state. Third, just as unelected officials play a role in adoption, I take seriously the ways in which elected officials influence implementation. Elected officials should be more involved in the implementation of diffusing policies than the implementation of other, federal policies because the elected officials made the decision to adopt

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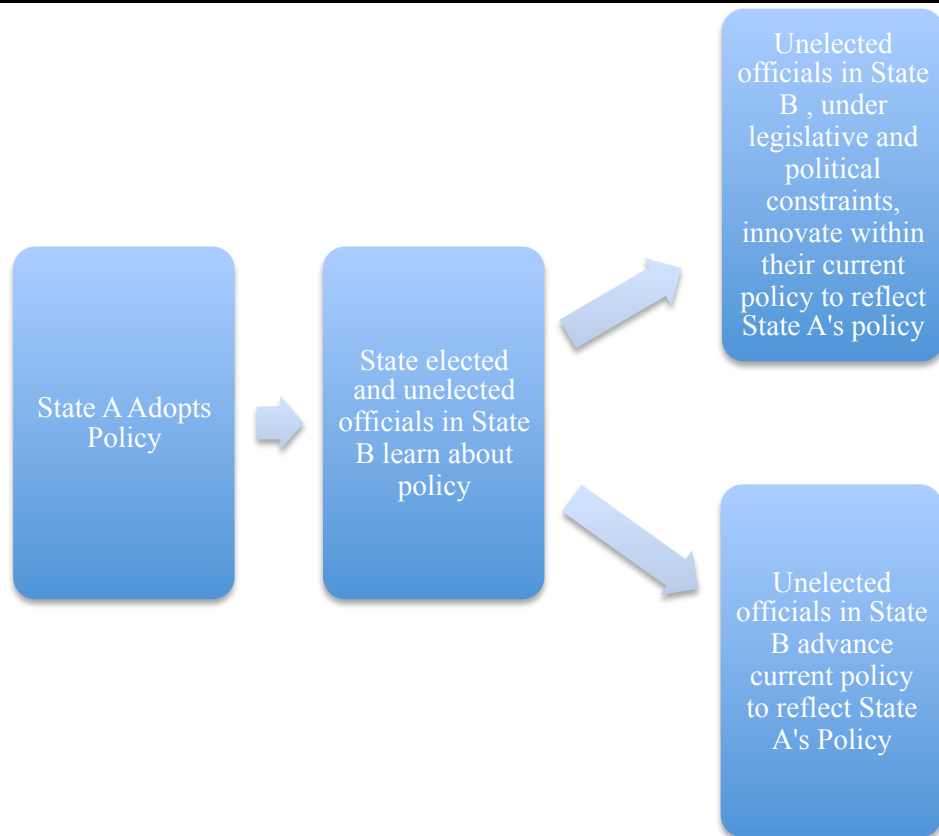
<sup>205</sup> Eric Patashnik, *Reforms at Risk: What Happens After Major Policy Changes are Enacted* (Princeton, NJ: Princeton University Press, 2008), 3.

the policy. Therefore, how it plays out in practice reflects on elected officials and could affect their re-election. Figure 2, from Chapter 1, demonstrates how states act as laboratories of bureaucracy during implementation.

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Figure 2: How Out-of-State Politics Can Facilitate Bureaucratic Learning in Implementation

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This chapter demonstrates that unelected officials are learning from policymaking in other states. They are then applying their learning to the policies previously adopted by elected officials without elected officials adopting new policies. In this way, states are operating as laboratories of bureaucracy. Bureaucratic learning coupled with the actions of elected officials can influence a state as it expands the reach of a policy in a state.

The implementation of universal pre-kindergarten provides a window into the electoral and bureaucratic politics that affect the state's extension of policy reach. Universal pre-

kindergarten has a well-defined policy goal: provide a pre-kindergarten education for four-year-olds who wish to participate. In studying the moment of adoption, we would assume that the four-year-olds in Massachusetts, Oklahoma, New York, West Virginia, Illinois, Vermont, Iowa, Georgia, and Florida would have an equal opportunity to participate in the state's universal pre-kindergarten program.<sup>206</sup> However, with Massachusetts enrolling 14.1 percent and Oklahoma enrolling 76.4 percent, four-year-olds in these states, even though they reside within states that have adopted universal pre-k, do not have the same access to pre-kindergarten. Furthermore, Wisconsin has a targeted pre-k program and enrolls 65.8 percent of its four-year-olds.<sup>207</sup> Many factors may contribute to these differences including party politics, available funds, and the actions of the education bureaucracy. These differences raise questions about what in-state and out-of-state political dynamics can structure differences of policy reach within states.

This chapter explores how internal electoral and bureaucratic dynamics as well as how out-of-state politics influence policy reach. Elected officials in unified party government, governors with appointment powers, bureaucratic regulations and what neighboring states are doing with their pre-k policies influence policy reach within a state. In the next section I discuss policy reach as a form of implementation, explain why out-of-state politics would bear on implementation, then I closely examine three states before I conduct a large-N quantitative analysis.

### Implementation as Policy Reach

Chapter 1 presented implementation as policy reach and argued its advantage over other forms of implementation. Implementation has been conceptualized in different ways, such as

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<sup>206</sup> Please see Appendix F for the state statutes.

<sup>207</sup> Barnett et al., 2014.

dispositions,<sup>208</sup> adaptation,<sup>209</sup> or compliance.<sup>210</sup> One way that it has not been conceptualized is as policy reach, which is how and whether the state spreads a policy within its borders. Over time both state and the federal governments have developed and expanded as well as become more involved in different policy areas. Because differences in policy design can have effects on citizens' efficacy and attitudes, it is important to explore the political dynamics that determine whether and how policies reach the citizens in a state.<sup>211</sup>

Conceptualizing implementation as policy reach builds off of Lipsky's (1971) work on street-level bureaucrats.<sup>212</sup> Lipsky argues that street-level bureaucrats make decisions that can determine who has access to policies. Policy reach builds off of this idea, but moves away from micro-level bureaucratic decisions and focuses on how the state systematically expands or restricts the spread of policy. Policy reach, as a form of implementation, also provides leverage for studying the action of elected officials in implementation. Implementation as compliance focuses on how elected officials can encourage the bureaucracy to comply with their policy

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<sup>208</sup> Pressman and Wildavsky (1984) describe implementation as dispositions. Policy design and unexpected situations create dispositions for different actors to act in different ways. Sometimes these dispositions can create delays and problems with implementing a policy.

<sup>209</sup> Richard Emlore (1979) describes implementation as adaptation whereby the street-level bureaucrat has maximized decision-making power. He argues that states should engage in 'backward-mapping' so that they design policies thinking about how they will be put into practice.

<sup>210</sup> Many top-down scholars, such as Mazmanian and Sabatier and O'Toole, study implementation as compliance. This means that top officials induce street-level bureaucrats to comply with the letter of the law when putting the policy into practice. An example of a definition of "is the timely and satisfactory performance of certain necessary tasks related to carrying out the intent of the law." (Lester and Goggin 1998)

<sup>211</sup> Joe Soss, "Lessons of Welfare: Policy Design, Political Learning, and Political Action," *The American Political Science Review* 93(1999): 363-380.

<sup>212</sup> Michael Lipsky, "Street-Level Bureaucracy and the Analysis of Urban Reform," *Urban Affairs Quarterly* 6 (1971):

objectives.<sup>213</sup> Policy reach changes the role of elected officials by considering how they can influence the expansion or restriction of a policy in a state.

Elected officials can determine the goal of the policy during adoption, but policy reach can be determined as the policy is implemented. For example, the Medicaid expansion allows for individuals at or below 138 percent of the poverty line to participate in Medicaid.<sup>214</sup> The goal of this policy is to provide health insurance to citizens in the state. With this policy, one way to think about reach would be how many state residents who are at or below 138 percent of the poverty line choose to sign up for Medicaid. Another way to think about reach would be to consider how many states extend the policy to undocumented immigrants and how many undocumented immigrants are able to participate in the policy. In these ways, there is room for actors to determine reach during implementation.

Extending policy reach involves a variety of actors including bureaucrats, governors, legislators, interest groups, third party providers, and citizens. The governor can decide whether to help expand or restrict a policy's reach depending upon their re-election interests. The governor will want to extend the reach of a policy that could gain her an electoral advantage in a re-election campaign or could give her political leverage to pursue other policy objectives. A governor can comply with the law without taking action to expand its reach when it will hurt her electoral interests. Similarly, bureaucrats may be more likely to extend the reach of a policy that better establishes their department in the state and bolsters their reputations. However, bureaucrats may not work to expand the reach of a policy that might be against their interests.

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<sup>213</sup> See Brian J. Gerber, Cherie Maestas and Nelson C. Dometrius, "State Legislative Influence over Agency Rulemaking: The Utility of Ex Ante Review," *State Politics and Policy Quarterly* 5 (2005):24-46.

<sup>214</sup> Rachel Garfield, Anthony Damico, Cynthia Cox, Gary Claxton, and Larry Levitt, "Estimates of Eligibility for ACA Coverage among the Uninsured in 2016," The Henry J. Kaiser Family Foundation, October 18, 2016, <http://kff.org/health-reform/issue-brief/new-estimates-of-eligibility-for-aca-coverage-among-the-uninsured/>, accessed January 30, 2017.

Table 3.1 describes the expected action of elected officials will take to expand or restrict reach depending upon their interests.

| Table 3.1: Expected Policy Reach Actions of Elected Officials |                                        |                 |
|---------------------------------------------------------------|----------------------------------------|-----------------|
| State Actor                                                   | Potential Policy Effects               | Expected Action |
| Elected Official                                              | May provide electoral benefits         | Expands reach   |
| Elected Official                                              | Unlikely to provide electoral benefits | Restricts reach |

I assess the implementation of state pre-kindergarten policies using policy reach. The goal of state pre-kindergarten policies is to provide pre-kindergarten education to four-year-olds in the state. The reach of this policy is measured as the percentage of four-year-olds in the state who are enrolled in the state's pre-kindergarten program.<sup>215</sup> We can observe whether state actors make decisions to extend the reach of the policy by looking at how many children enrolled in the state's pre-kindergarten program. Enrollment in the pre-kindergarten program is the most appropriate measure of policy reach because it examines whether and to what extent the policy spread within state borders. States have extended the reach of their pre-kindergarten policy differently. The next section discusses how different dynamics, such as out-of-state politics and elected officials may bear on the ability of states to extend the reach of their policies.

#### How Out-of-State Politics Influences Implementation

Chapter 2 discussed how implementation politics, such as bureaucrats and bureaucratic expertise, could structure diffusion by influencing which states adopted the policy. In this chapter I argue that adoption dynamics within one state can influence policy reach across other

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<sup>215</sup> Another way to think about reach would be in terms of geography. The goal of state pre-kindergarten programs is to educate four-year-old residents. One way to think about a policy's reach is to consider where the policy spread. Essentially, did the policy reach to four-year-olds in rural areas where it may be more difficult to find, establish, and run pre-kindergarten classrooms? As of now, the data on whether the children who are enrolled in the program are in rural or urban areas is unavailable for all states across multiple years. With available data, this would be a promising avenue of future research.

states. This occurs because elected and unelected officials participate in policy learning and use that learning to influence implementation within their state.<sup>216</sup>

The diffusion mechanism of learning is a primary way in which out-of-state politics bears on implementation. Learning is one of the four main mechanisms of diffusion.<sup>217</sup> States are more likely to adopt policies that other states have adopted because they learn about these policies from their neighbors. The mechanism of learning can also facilitate the effect of out-of-state politics on implementation. The adoption of policy in a regional state raises the salience of a policy issue and makes it more likely for learning to occur. Graeme Boushey (2016) has demonstrated the importance of national salience in the diffusion of policy. Even if a state does not adopt their neighbor's policy, elected and unelected officials can become more aware of a policy problem when their neighbor addresses that problem. This can occur through overlapping media markets, regional professional associations, and interest group associations. This can also occur via citizens. As Pacheco (2012) argues, citizens are a key element in diffusion because they can experience policies across state borders and pressure their elected officials to adopt those same policies.<sup>218</sup> In this way, the politics in another state can create opportunities for officials to participate in policy learning.

Policy learning can occur during implementation because state officials can learn about policies adopted by nearby states and then direct the implementation of their own, similar

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<sup>216</sup> Elected officials and unelected officials may participate in learning when information is available. Many times networks may facilitate the spread of information. For a discussion of policy entrepreneurs and networks please see Michael Mintrom, "Policy Entrepreneurs and the Diffusion of Innovation," *American Journal of Political Science* 41 (1997): 738-770; Michael Mintrom and Sandra Vergari, "Policy Networks and Innovation Diffusion: The Case of State Education Reforms," *The Journal of Politics* 60 (1998): 126-148.

<sup>217</sup> Erin R. Graham, Charles R. Shipan, and Craig Volden, "The Diffusion of Policy Diffusion Research in Political Science," *British Journal of Political Science* 43 (2013): 673-701.

<sup>218</sup> Julianna Pacheco, "The Social Contagion Model: Exploring the role of Public Opinion on the Diffusion of Antismoking Legislation Across America," *The Journal of Politics* 74 (2012): 187-202.

policies to reflect their neighbor's policy. In this way, out-of-state politics can provide opportunities for both elected and unelected officials to learn as they are implementing policies. The diffusion literature assumes that out-of-state policy adoption structures one stage of the policy process, adoption. However, out-of-state politics can bear on both the adoption and the implementation of policy because state officials can learn throughout the policy process.

Bureaucrats can also learn from other states as they implement policies. Federal-level bureaucrats can learn from experiments within their agencies and innovate within their agencies.<sup>219</sup> Using the lens of diffusion, bureaucrats at the federal and state level can draw from policy experiments within and across states. Just as elected officials learn across states, bureaucrats can learn from other states as well. When asked whether the department looks to other states' implementation when implementing their own pre-k program, one bureaucrat noted "we actively participate with other states and look at the kinds of things they are doing, the studies that they are doing, we learn from other states, participate in you know PD opportunities, conferences, and different things. We also look at the kinds of things that they are doing in their programs to improve ours."<sup>220</sup> This is one example of how bureaucrats participate in learning during implementation.

The politics of adoption within a state can influence the expansion of policy reach within that state as well. Implementation offers a new venue where elected officials, who were opposed to the policy during adoption, can restrict the reach of policy.<sup>221</sup> In both Georgia and New York, elected officials who were opponents of universal pre-k or ambivalent to its passage used the

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<sup>219</sup> Daniel Carpenter, *The Forging of Bureaucratic Autonomy: Reputations, Networks, and Policy Innovation in Executive Agencies, 1863-1928* (Princeton, NJ: Princeton University Press, 2001).

<sup>220</sup> Respondent in the bureaucracy interviewed by Kelly Smith, interview number 6, via phone in July 2016.

<sup>221</sup> Eugene Bardach, *The Implementation Game: What Happens After a Bill Becomes a Law* (The MIT Press: Cambridge MA, 1977).

implementation venue to try and limit the policy's reach. For example, in New York, Governor Pataki agreed to adopt universal pre-k as part of larger budget negotiations. However, Governor Pataki is blamed for preventing the state from funding universal pre-k in the following years.<sup>222</sup> Political opposition to a policy does not end after adoption; instead elected officials within a state have a new venue in which to pursue their policy goals as policy is put into practice.

Studying diffusion and implementation together reveals ways in which out-of-state politics can bear on implementation. The politics of adoption within a state can affect the implementation of policies in other states because it presents an opportunity for state officials to participate in learning and apply that learning to similar programs within their states. Bureaucratic learning can also occur during implementation. With fifty other education departments, bureaucrats may have many out-of-state resources, networks, and think tanks to learn from when implementing policies.

### Pre-kindergarten Policy

The policy of universal pre-k provides a window into how electoral and bureaucratic politics influences the expansion of policy reach throughout a state and across states. Putting universal pre-k into practice involves the state working with public schools, Head Start centers, and private childcare centers to offer pre-kindergarten classes to state residents. The goal of the policy is particularly clear in this case which is to educate four-year-olds in the state. Therefore, when a state puts universal pre-k into practice, expanding the reach of the policy means that any and all four-year-olds are eligible to participate in pre-k classes. Centers cannot refuse students based on whether they live above or below the poverty line, whether they have risk factors, or whether they live in an urban center. Putting this policy into practice entails developing a pre-k

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<sup>222</sup> Winnie Hu, "A Promise of Pre-k for All is Still Far Off in New York," *The New York Times*, August 22, 2008, [http://www.nytimes.com/2008/08/23/education/23prek.html?\\_r=0](http://www.nytimes.com/2008/08/23/education/23prek.html?_r=0).

curriculum, creating academic standards and workplace regulations, working with public and private pre-k providers to offer pre-k classes, and ensuring that those classes are high quality. Targeted pre-kindergarten programs have some type of requirements, such as family income level, which makes a student eligible to participate. Finally, some states do not have any form of state pre-kindergarten. Children in these states may still have access to private pre-kindergarten classes or Head Start classes. Table 3.2 presents the differences in policy reach across states.

Table 3.2: Enrollment in State Pre-k Programs  
2014<sup>223</sup>

| <b>Targeted Programs</b>                            |        |
|-----------------------------------------------------|--------|
| Wisconsin                                           | 63.70% |
| Texas                                               | 47.80% |
| South Carolina                                      | 46.90% |
| Arkansas                                            | 38.50% |
| Maine                                               | 36.20% |
| Maryland                                            | 36.00% |
| Michigan                                            | 32.00% |
| Louisiana                                           | 31.90% |
| Nebraska                                            | 30.50% |
| New Mexico                                          | 30.00% |
| New Jersey                                          | 28.60% |
| Kentucky                                            | 25.85% |
| Colorado                                            | 23.30% |
| Connecticut                                         | 23.10% |
| North Carolina                                      | 21.50% |
| Kansas                                              | 20.00% |
| Tennessee                                           | 19.30% |
| Virginia                                            | 17.90% |
| California                                          | 17.50% |
| Alabama                                             | 12.00% |
| Pennsylvania                                        | 12.00% |
| Oregon                                              | 10.00% |
| Washington                                          | 8.00%  |
| Delaware                                            | 7.50%  |
| Arizona                                             | 5.50%  |
| Ohio                                                | 4.80%  |
| Mississippi                                         | 4.10%  |
| Missouri                                            | 3.90%  |
| Alaska                                              | 3.10%  |
| Nevada                                              | 3.00%  |
| Rhode Island                                        | 2.80%  |
| Hawaii                                              | 2.10%  |
| Minnesota                                           | 1.00%  |
| <b>Universal Pre-k States</b>                       |        |
| Vermont (adopted 2014)                              | 83.90% |
| Florida                                             | 76.50% |
| Oklahoma                                            | 74.80% |
| West Virginia                                       | 68.00% |
| Iowa                                                | 61.10% |
| Georgia                                             | 58.80% |
| New York                                            | 48.70% |
| Illinois                                            | 27.00% |
| Massachusetts                                       | 7.20%  |
| <b>States without Pre-k Programs <sup>[1]</sup></b> |        |
| Idaho                                               | 0%     |
| Indiana                                             | 0%     |
| Montana                                             | 0%     |
| New Hampshire                                       | 0%     |
| North Dakota                                        | 0%     |

<sup>223</sup> Percentage of four-year-olds enrolled in the state pre-k program.

|              |    |
|--------------|----|
| South Dakota | 0% |
| Utah         | 0% |
| Wyoming      | 0% |

Source: Author's table created using data from Barnett, W. Steven, Megan E. Carolan, James H. Squires, and Kristy Clarke Brown, *The State of Preschool 2014: State Preschool Yearbook*, New Brunswick: National Institute for Early Education Research, 2015.

Even though the policy goal is clear, states have expanded the reach of the policy differently. In 2015 Georgia enrolled 58.8 percent of its four-year-olds in its universal pre-k program although Massachusetts enrolled 7.2 percent.<sup>224</sup> Georgia's Governor was the first to propose universal pre-kindergarten and was particularly devoted to the idea. He was interested in expanding the reach of one of his primary policies. Georgia was also one of the first states to adopt early childhood learning standards. They adopted standards in 1996 even though the initiative to create early learning standards did not begin until President Bush's Good Start, Grow Smart Initiative in 2002.<sup>225</sup> Both elected and bureaucratic officials in Georgia have paid particular attention to early childhood education policies. Table 3.3 presents some elements of early childhood standards across states.

<sup>224</sup> W. Steven Barnett, Friedman-Krauss, A. H., Gomez, R. E., Horowitz, M., Weisenfeld, G. G., & Squires, J. H. (2016). *The State of Preschool 2015: State Preschool Yearbook*. New Brunswick, NJ: National Institute for Early Education Research.

<sup>225</sup> W. Steven Barnett, Hustedt, Jason T., Hawkinson, Laura E., and Robin, Kenneth B. (2006). *The State of Preschool 2006: State Preschool Yearbook*. New Brunswick, NJ: National Institute for Early Education Research; "Good Start, Grow Smart: The Bush Administration's Early Childhood Initiative," <https://georgewbush-whitehouse.archives.gov/infocus/earlychildhood/earlychildhood.html>, accessed Jan 26, 2017.

Table 3.3: Elements of Early Childhood Standards

| State     | Standards                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Georgia   | <p><b>Name:</b> Georgia Early Learning and Development Standards: Resource Guide for 3-and4-year-olds</p> <p><b>Guiding Principles:</b></p> <ol style="list-style-type: none"> <li>1. Effective early education programs recognize the significance of the parental role and invite their participation.</li> <li>2. Each child develops at an individual rate and has personal approaches to learning.</li> <li>3. Young children learn through developmentally appropriate play and social interaction.</li> <li>4. Young children learn best when all aspects of development (physical, emotional and social; approaches to learning; and cognitive) are treated as interconnected.</li> <li>5. Early learning experiences must support each child’s family, community and culture.</li> <li>6. Early childhood teachers play a powerful role in the education of young learners and deserve dignity and respect from the community at large.</li> <li>7. Quality early learning experiences for children are guided by research-based knowledge and practice.</li> </ol> <p><b>Learning Domains:</b></p> <ol style="list-style-type: none"> <li>1. Physical Development and Motor Skills</li> <li>2. Social and Emotional Development</li> <li>3. Approaches to Play and Learning</li> <li>4. Communication, Language and Literacy</li> <li>5. Cognitive Development and General Knowledge</li> </ol> |
| Louisiana | <p><b>Name:</b> Louisiana’s Birth to Five Early Learning and Development Standards</p> <p><b>Guiding Principles:</b></p> <ol style="list-style-type: none"> <li>1. Early learning and development are multidimensional; developmental domains are highly interrelated.</li> <li>2. Young children are capable and competent.</li> <li>3. There are individual differences in rates of development among children.</li> <li>4. Children will exhibit a range of skills and competencies in any domain of development.</li> <li>5. Families are the primary caregivers and educators of their young children.</li> <li>6. Young children learn through active exploration of their environment through children-initiated and teacher-selected activities.</li> </ol> <p><b>Learning Domains:</b></p> <ol style="list-style-type: none"> <li>1. Approaches to Learning</li> <li>2. Cognitive Development and General Knowledge (including content areas of Creative Thinking and Expression,</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                     |

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|             | <p>Mathematics, Science, and Social Studies).</p> <ol style="list-style-type: none"> <li>3. Language and Literacy Development</li> <li>4. Physical Well-Being and Motor Development; and</li> <li>5. Social-Emotional Development</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| California  | <p><b>Name:</b> California Preschool Learning Foundations Volume 1, Volume 2, and Volume 3</p> <p><b>Guiding Principles:</b> None</p> <p><b>Learning Foundations:</b></p> <ol style="list-style-type: none"> <li>1. Social-Emotional Development (Volume 1)</li> <li>2. Language and Literacy (Volume 1)</li> <li>3. English-Language Development (Volume 1)</li> <li>4. Mathematics (Volume 1)</li> <li>5. Performing Arts (Volume 2)</li> <li>6. Physical Development (Volume 2)</li> <li>7. Health (Volume 2)</li> <li>8. History-Social Science (Volume 3)</li> <li>9. Science (Volume 3)</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Connecticut | <p><b>Name:</b> Connecticut Early Learning and Development Standards: What Children Birth to Five Should Know and be Able to Do.</p> <p><b>Guiding Principles:</b></p> <ol style="list-style-type: none"> <li>1. Young children are capable and competent</li> <li>2. Young children learn best when their basic needs are met</li> <li>3. Young children are unique in their growth and development</li> <li>4. Young children develop and learn within the context of their family culture</li> <li>5. Families are the primary caregivers and educators of young children</li> <li>6. Families are critical partners in all early learning environments</li> <li>7. Early learning environments support young children to learn in the context of relationships.</li> <li>8. Early learning environments reinforce the importance of the cultural context of young children, families and communities</li> <li>9. Early learning environments provide opportunities for active exploration</li> <li>10. Early learning environments provide meaningful inclusion of children with special needs</li> <li>11. Early learning environments provide experiences that are relevant and integrated across domains of development</li> <li>12. Early learning environments intentionally promote the development of skills and knowledge</li> <li>13. Early learning environments provide opportunities for children to benefit from diversity</li> <li>14. Early learning environments support children's language development in their primary language</li> <li>15. Communities believe that all children deserve high-quality early</li> </ol> |

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p>learning experiences</p> <p>16. Communities offer a variety of resources that support early growth and development</p> <p>17. Communities strategically plan to meet the needs of children and families</p> <p><b>Domains (3-5):</b></p> <ol style="list-style-type: none"> <li>1. Physical Development and Health</li> <li>2. Language and Literacy (Supplemental Dual Language Development Framework)</li> <li>3. Creative Arts</li> <li>4. Mathematics</li> <li>5. Science</li> <li>6. Cognition</li> <li>7. Social Studies</li> <li>8. Social and Emotional Development</li> </ol> |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Source: Author's data created from Georgia Department of Early Care and Learning, *Georgia Early Learning and Development Standards: Resource Guide for 3- and 4-Year-Olds*, Atlanta, Georgia: Georgia Department of Early Care and Learning; Louisiana Department of Education, *Louisiana's Birth to Five Early Learning & Development Standards*, Louisiana: Louisiana Department of Education, 2013; California Department of Education, *California Preschool Learning Foundations Volume 1*, Sacramento, CA: California Department of Education, 2008; California Department of Education, *California Preschool Learning Foundations Volume 2*, Sacramento, CA: California Department of Education, 2010; California Department of Education, *California Preschool Learning Foundations Volume 3*, Sacramento, CA: California Department of Education, 2012; Connecticut Early Childhood Education Cabinet and Connecticut Office of Early Childhood, *Connecticut Early Learning and Development Standards: What Children, Birth to Five, Should Know and be Able to Do*, Connecticut: Connecticut Office of Early Childhood, April 2014.

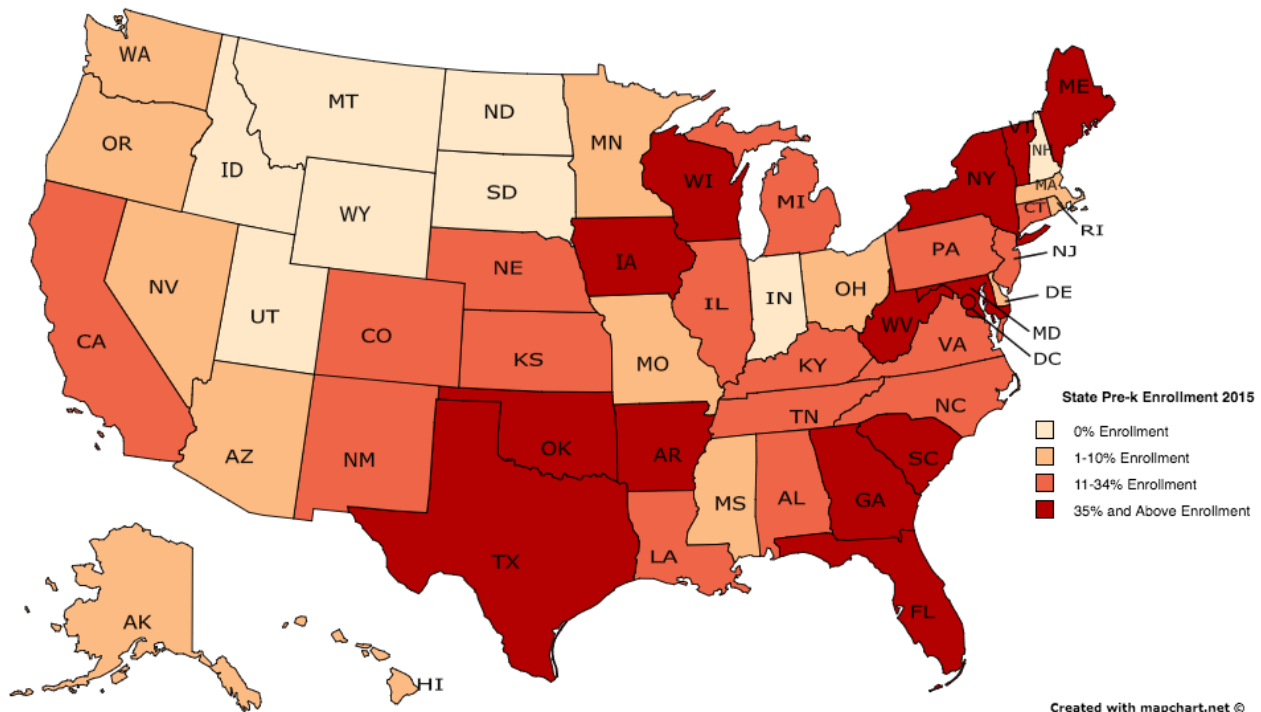
In the following section, I explore the politics of implementation closely in three states. Although Massachusetts has adopted universal pre-kindergarten, Tennessee and New Jersey both have adopted targeted programs. These three states have adopted different policies as well as faced different electoral and bureaucratic obstacles in adopting and implementing pre-kindergarten policies. They have also expanded the reach of their policies differently. New Jersey and Tennessee both have targeted pre-k programs but New Jersey enrolled 28.6 percent and Tennessee enrolled 19.3 percent of its four-year-olds in 2015.<sup>226</sup> Despite different programs, both Massachusetts and Tennessee have faced electoral challenges as they expand the reach of their programs. A visual representation of enrollment differences across states can be seen in Graph 3.1. The case of Tennessee, New Jersey, and Massachusetts demonstrate how electoral

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<sup>226</sup> Barnett et al, 2016.

and party politics continue to shape implementation within state, how bureaucrats participate in policy learning across states, and how bureaucrats can innovate within their own departments to structure implementation. Overall, the experiences of these states in expanding the reach of their pre-k programs provide leverage for considering the role of elected officials, bureaucrats, and policy learning in policy implementation.

Graph 3.1: Enrollment in State Pre-kindergarten 2015



Source: Author's map created with data from W. Steven Barnett, Friedman-Krauss, A. H., Gomez, R. E., Horowitz, M., Weisenfeld, G. G., & Squires, J. H. (2016). *The State of Preschool 2015: State Preschool Yearbook*. New Brunswick, NJ: National Institute for Early Education Research.

In the following section, I also begin to include information I gathered from my interviews. I conducted sixteen semi-structured interviews with legislators and unelected officials in four different states throughout July, August, and September of 2016. I also conducted six follow-up interviews in January, February, and March of 2017. I asked questions about involvement in the adoption and implementation of their state's pre-kindergarten policy as well as policy learning across states. Because of a low response rate, information from the

interviews is treated as illustrative rather than used to make broad claims. Appendix E has a description of the interviews, interview protocol, and interview questions.

### Tennessee

The case of Tennessee provides insights into how electoral politics can continue to shape implementation. Tennessee currently enrolls 19.3% of its four-year-olds in its state pre-kindergarten program. Ninety-six percent of districts offer the program and the state spends about 84 million dollars on its pre-kindergarten program. Recently, a Vanderbilt University study of the state pre-kindergarten program that found the benefits of pre-kindergarten disappeared by third grade.<sup>227</sup> The results of this study have raised questions about Tennessee's program. Using the lens of diffusion provides a new view of how elected officials try to expand or restrict the reach of policy. Elected officials can influence implementation in ways other than compliance.

The Governor of Tennessee, Phil Bredesen, led the charge to adopt Tennessee's targeted preschool program, entitled Voluntary Pre-k, in 2005.<sup>228</sup> The bill passed both the House and the Senate by a large margin.<sup>229</sup> This program developed from a pilot program passed in 1996 entitled the Early Childhood Education Pilot Project.<sup>230</sup> Soon after establishing Voluntary Pre-k,

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<sup>227</sup> See Mark W. Lipsey, Dale C. Farran, and Kerry G. Hofer, "A Randomized Control Trial of a Statewide Voluntary Prekindergarten Program on Children's Skills and Behaviors Through the Third Grade," Peabody Research Institute, September 2015, [https://my.vanderbilt.edu/tnprekevaluation/files/2013/10/VPKthrough3rd\\_final\\_withcover.pdf](https://my.vanderbilt.edu/tnprekevaluation/files/2013/10/VPKthrough3rd_final_withcover.pdf), accessed January 31, 2017.

<sup>228</sup> Grace Tatter, "Once Seeking to Scrap Pre-K, Tennessee's Biggest Pre-K Critic Votes to Improve It," ChalkBeat, February 24, 2016.

<sup>229</sup> "Voluntary Pre-K in Tennessee: Understanding the Collaboration Model," Tennessee Alliance for Early Education, March 2008.

<sup>230</sup> Justin P. Wilson, Tennessee Comptroller of the Treasury, "Tennessee's Pre-Kindergarten Program," Office of Research and Education Accountability, October 2009.

the state created the Office of Early Learning.<sup>231</sup> Following Georgia, Tennessee began this program using lottery funds. Since its adoption, the governor has expanded the amount of money for the program, with funding remaining relatively stagnant since 2008.<sup>232</sup> In 2008 both the Lt. Governor and Knoxville Representative opposed expanding the program to all four-year-olds. The Republican representative noted that early education is not the responsibility of the government.<sup>233</sup>

The education commissioner, the governor, and the legislature have disagreed over the financial investment that the state should place in pre-k. In 2012, “Commissioner Kevin Huffman says the program [targeted pre-k] will require an additional 2 million dollars just for routine cost increases. [Governor] Haslam has asked state departments to cut 5 percent in spending as a fallback. House Democratic Caucus Chairman Mike Turner says...He plans to speak with the governor to consider legislation to expand them.”<sup>234</sup> Funding was further questioned after a longitudinal study conducted by Vanderbilt University found the state’s pre-k program led to positive gains in kindergarten but that many gains became stagnant or reverted by third grade.<sup>235</sup> This created opposition among Republican legislators in deciding whether to

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<sup>231</sup> AP Report, “State Agency Opens Office to Handle Preschool Funding and Oversight,” *Chattanooga Times Free Press*, July 12, 2005.

<sup>232</sup> “Voluntary Pre-k,” Tennessee Department of Education, <https://www.tn.gov/education/topic/voluntary-pre-k>; Wilson, 2009.

<sup>233</sup> Tom Humphrey, “Ragsdale Agrees with Bredesen on Major State Funding,” *Knoxville News Sentinel*, January 10, 2008.

<sup>234</sup> Whitney Jones, “Tenn. Democrats Want Pre-K Expansion,” *WKMS Murray State’s NPR Station*, November 7, 2012, <http://wkms.org/post/tenn-democrats-want-pre-k-expansion#stream/0>.

<sup>235</sup> See Mark W. Lipsey, Dale C. Farran, and Kerry G. Hofer, “A Randomized Control Trial of a Statewide Voluntary Prekindergarten Program on Children’s Skills and Behaviors Through the Third Grade,” Peabody Research Institute, September 2015, [https://my.vanderbilt.edu/tnprekevaluation/files/2013/10/VPKthrough3rd\\_final\\_withcover.pdf](https://my.vanderbilt.edu/tnprekevaluation/files/2013/10/VPKthrough3rd_final_withcover.pdf), accessed January 31, 2017.

continue expanding funding for the program.<sup>236</sup> Although Tennessee’s Voluntary Pre-k bill received bipartisan support during adoption, party and branch disagreements over the direction of the program have defined its implementation.

Almost all of Tennessee’s counties offer the program’s pre-k classes even though the bill states “Implementation of these programs by local education agencies shall be voluntary.”<sup>237</sup> Even with so many counties participating, the state enrolls about 20 percent of the state’s four-year-olds.<sup>238</sup> Although Tennessee has not adopted universal pre-k, the state’s Department of Education website notes that “Pre-k in Tennessee is accessible to all 4-year olds, with an emphasis on at-risk students and high priority communities.”<sup>239</sup> Shortly after adopting the targeted program, universal pre-kindergarten was discussed when Governor Bredesen “said that he would like to expand the program to serve all 4-year-olds, regardless of their socioeconomic status.”<sup>240</sup>

Tennessee has received support from interest groups in expanding the reach of its pre-k program. For example, “the Tennessee Association for the Education of Young Children and Tennessee Stand for Children joined forces to create the Tennessee Alliance for Early Education, a grassroots organization with the sole mission of supporting the expansion of Pre-K in Tennessee...the Alliance quickly grew from only two organizations to more than 75.”<sup>241</sup> Despite support from the Tennessee Alliance for Early Education and the citizens themselves with “three

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<sup>236</sup> Richard Locker, “Haslam, GOP Senators Differ on Future of Pre-K Program,” *Knoxville News Sentinel*, October 27, 2015, <http://www.knoxnews.com/news/politics/haslam-gop-senators-differ-on-future-of-pre-k-program-ep-1340821345-353331811.html>.

<sup>237</sup> Tennessee Public Acts 2005, Tennessee House Bill No. 2333, Chapter No. 312, <http://tennessee.gov/sos/acts/104/pub/pc0312.pdf>.

<sup>238</sup> Barnett et al, 2016.

<sup>239</sup> “Voluntary Pre-k,” Tennessee Department of Education.

<sup>240</sup> Ericka Mellon, “Knox Gets \$129, 874 for Pre-K Expansion- School District Hopes to Launch 3 New Classes to Join 10 Already Started,” *Knoxville News Sentinel*, July 14, 2006.

<sup>241</sup> Tennessee Alliance for Early Education 2008, pg. 1.

out of five Tennesseans believe[ing] the state should spend more money on prekindergarten programs,”<sup>242</sup> discussions of whether to expand funding for the program remain.

Tennessee’s experiences in adopting and implementing their pre-k program demonstrate how implementation is a new venue for elected officials, bureaucrats, and interest groups to influence how policy is put into practice. The case of Tennessee supports Evelyn Brodtkin’s (1990) argument that “that policy politics (the contest to determine what policy should be) is ubiquitous; it neither begins with the formulation of a policy proposal nor ends with its enactment or defeat.”<sup>243</sup> Despite bipartisan support for adopting the targeted pre-k program, party differences have been prominent in disagreements over the future of the program. With new political pressures, financial trade-offs, and more research based studies, party politics continues to shape the expansion of Tennessee’s state pre-k program. As discussed earlier, in March 2016 the legislature passed a bill to address quality issues across the state pre-kindergarten classrooms. Many of these changes reflect issues raised in the findings of the Vanderbilt study as well as the actions Nashville has been taking to implement its own program.<sup>244</sup>

### New Jersey

The case of New Jersey provides insight into two aspects of implementation. New Jersey exemplifies how early learning standards can bear on policy reach as well as how bureaucrats

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<sup>242</sup> Chas Sisk, “3 of 5 Tennesseans Want More Spent on Pre-k,” *Knoxville News Sentinel*, November 17, 2011.

<sup>243</sup> Evelyn Z. Brodtkin. Implementation as Policy Politics. In *Implementation and the Policy Process: Opening Up the Black Box*, Dennis J. Palumbo and Donald J. Calista (eds). (Westport, CT: Greenwood Press, 1990), 107

<sup>244</sup> Jason Gonzales, “Tennessee Legislature Approves Bill to Improve Pre-k,” *The Tennessean*, March 22, 2016, <http://www.tennessean.com/story/news/education/2016/03/22/tennessee-legislature-approves-bill-improve-pre-k/82112794/>, accessed March 23, 2017.

can participate in learning across states. New Jersey's standards have helped the state put their pre-k program into practice and their bureaucrats seek to learn from other states.

New Jersey adopted a targeted pre-kindergarten program after the New Jersey Supreme Court delivered a series of decisions in *Abbott v. Burke I*, *Abbott v. Burke II*, *Abbott v. Burke III*, and *Abbott v. Burke IV* that required the state to implement more equitable funding across urban and suburban districts. New Jersey's first targeted preschool program was established by the *Abbott v. Burke V* decision. Despite this ruling, there were additional battles between the New Jersey Supreme Court and the state to adequately fund the Abbott Preschool program. Implementation of the program was so poor that the "NJ Supreme Court, in *Abbott v. Burke VI*, rules that the state had failed to implement preschool education as directed and orders NJ Dept. of Education to overhaul the program for 2000-01."<sup>245</sup> The Abbott Preschool program was established to provide equal educational opportunities for children in under-funded districts.

New Jersey has more than one targeted pre-kindergarten program. The state also has the Non-Abbott Early Childhood Program Aid. This program "is required only in districts where 20 to 40 percent of children meet the criteria for free or reduced-price lunch services."<sup>246</sup> It enrolled 7,309 four-year-olds in the 2013-2014 school year. The other preschool program funded by New Jersey is the Early Launch to Learn Initiative, which began in 2004. The funds for this program were meant to be used "to improve program quality, extend program hours or to expand prekindergarten enrollment." The Early Launch to Learn Initiative enrolled 601 students in the 2013-2014 school year due to limits in funding. New Jersey is unique in that their primary targeted pre-kindergarten program, the Abbott program, was adopted via a New Jersey Supreme Court decision. However, despite early implementation struggles, the Abbott program enrolled

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<sup>245</sup> The information in this paragraph comes from "History of Funding Equity," New Jersey Department of Education, <http://www.state.nj.us/education/archive/abbotts/chrono/>, accessed January 30, 2017.

<sup>246</sup> Barnett, 2014, p. 94

43,896 children in the 2013-2014 school year and is the largest of New Jersey's pre-k programs by far.<sup>247</sup>

New Jersey also adopted early learning standards in 2000, prior to President Bush's Good Start, Grow Smart initiative. The most updated version of their early learning standards draw from publications from the Northeast Foundation for Children, the National Association for the Education of Young Children, and the Council for Exceptional Children. Furthermore, in the bibliography, they note the development of their standards included "Reviews of the current preschool standards in the states of Washington, Maryland, Pennsylvania, Connecticut, California, Virginia, Illinois, Oregon, North Carolina, Delaware, Wisconsin, Colorado, New Mexico, and Massachusetts."<sup>248</sup> At the end of their bibliography they noted the role of Minnesota, South Carolina, Iowa, Nebraska, New Jersey's prior standards, Pennsylvania, and Rhode Island's early learning standards in developing their Approaches to Learning Standards.<sup>249</sup>

The New Jersey Department of Education has drawn heavily from other groups and other states in the development of their standards that guides the implementation of early learning programs in their state. In an interview, one bureaucrat mentioned that regulations have helped the implementation process. From being involved in developing the guidelines, they learned "it's important to impose a structure because if you don't, you know hiring certified teachers, stating which curricula are to be used, if you don't do that it won't be a high quality program. I think it is important to establish the structural components...so you can increase your chances that it will have positive benefits for kids if you provide a structure around the program."<sup>250</sup>

When asked about whether they used professional networks and websites to learn about state

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<sup>247</sup> All of the information in this paragraph comes from Barnett, 2014, p. 94.

<sup>248</sup> "Preschool Teaching and Learning Standards," New Jersey Department of Education, 2014, 104.

<sup>249</sup> New Jersey Department of Education, 2014, 107. They also mention Head Start.

<sup>250</sup> Interview with member of the bureaucracy, interview number 8, via telephone in August 2016.

pre-k policy, the respondent said “we looked at research on best practices and we relied on that research to build our all of our guidance and standards.” When I asked about contacting other states, the respondent said they do talk to other states at meetings where “we share information in the form of presentation and we have more informal conversations with other states” noting that “Maryland is doing some really cool stuff and Massachusetts.”<sup>251</sup>

The case of New Jersey demonstrates that standards and regulations, like those seen in Table 4.3, have the potential to assist states as they try to expand the reach of policy. When asked whether regulations have helped, one legislator said “oh yes, absolutely... because the parents can be assured that their [centers] meeting standards that are going to benefit their children.”<sup>252</sup> It also demonstrates, from New Jersey’s Preschool Teaching and Learning Standards, that bureaucrats gather information across state lines and apply these lessons to their own policies.

#### Massachusetts

The case of Massachusetts demonstrates that, even within states that have adopted the diffusing policy, electoral politics can influence how they implement the policy. Differences in electoral politics, then, can shape how states that have adopted the same policy implement the policies differently. The case of Massachusetts also demonstrates that bureaucrats and political appointees are still interested in learning even after their state has adopted the diffusing policy.

Whereas the governor and bureaucracy in Tennessee emphasized that the goal of their targeted program was to expand access to all children, Massachusetts has adopted universal pre-k without many residents or politicians realizing it. In 2004, Massachusetts passed “An Act Establishing a Department of Early Education and Care” on July 23, 2004. Section 3a of that

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<sup>251</sup> Interview with member of the bureaucracy, interview number 8, via telephone in August 2016.

<sup>252</sup> Interview with a legislator, interview number 14, via telephone in September 2016.

law states that “The board shall oversee the development and implementation of a program of voluntary, universally accessible high-quality early education to all preschool-aged children in the commonwealth, subject to appropriation” which was set to take effect on March 1, 2005.<sup>253</sup> Despite this being the case, the General Assembly continued to try to adopt a universal pre-kindergarten program in 2006 when the House voted 150 to 0 on H4746 whereby “a key provision establishes the Massachusetts Universal Pre-k Program.”<sup>254</sup> Governor Mitt Romney, however, vetoed the legislation.<sup>255</sup> The battle between the legislature and executive to adopt and fund universal pre-k was occurring in the background of the state having previously authorized universal pre-kindergarten in the state statutes. It is possible for a state to have multiple pre-kindergarten programs at one time, but it seems Massachusetts’ authorization of a universal pre-kindergarten program might have been obscured by being included in legislation that established a new state department.

The struggle for universal pre-kindergarten continued in Massachusetts well beyond 2006 despite having universal pre-k authorized in the state’s statutes. In 2008, Governor Deval L. Patrick developed his Readiness Project aimed to reform the Massachusetts education system. One of the main components of the Readiness Project was universal pre-k. Although the 2006 battle was characterized by the relationship between the legislature and the executive, in 2008 Governor Patrick faced challenges from bureaucracy because of his Readiness Project. Mitchell Chester, the Education Commissioner, stated “he was not worried that the creation of a new secretary of education would undermine his authority because he still reports solely to the Board

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<sup>253</sup> An Act Establishing A Department of Early Education and Care, MA General Law (2004) Chapter 205 Section 15D:3(a). <https://malegislature.gov/Laws/SessionLaws/Acts/2004/Chapter205>

<sup>254</sup> Staff, “How They Voted-Massachusetts Legislature,” *The Republican*, March 19, 2006.

<sup>255</sup> Jacqueline Reis, “Statewide Pre-k Takes First Steps in Pilot Program,” *Worcester Telegram and Gazette*, July 29, 2006.

of Education.”<sup>256</sup> Even so, the program expanded in 2008 when “the pilot program was funded at \$7.1 million...A \$5 million increase in funds is supported by the Legislature and Gov. Deval L. Patrick.”<sup>257</sup> Battles between the branches of government in 2008 were largely a result of differences in how much funding the state was willing and able to dedicate to pre-kindergarten.

Universal pre-kindergarten remained an important issue in 2014. Gubernatorial candidates such as Steven Grossman, Martha Coakley, and Donald Berwick said that they would “launch,” “ensure,” or “invest” in universal pre-k during their campaigns, which suggests Massachusetts did not have or had a limited universal pre-kindergarten program.<sup>258</sup> Despite Democratic pushes to expand access to pre-k, Governor Baker, his Secretary of Education, and the Commissioner of Early Care and Learning have raised concerns over expanding access without ensuring quality.<sup>259</sup> However, a Massachusetts poll found support for investing in early education and “fifty percent said they would be more likely to vote for a legislator who supported raising taxes to pay for pre-kindergarten while 41 percent said they would be less likely to vote for that legislator and the remaining respondents were undecided.”<sup>260</sup> Electoral politics has been shaping putting policy into practice in Massachusetts as actors in the state disagree as to how and even whether the state should expand the reach of policy in the state.

Unelected officials in Massachusetts continue to learn despite the disagreements surrounding universal pre-kindergarten. One political appointee in Massachusetts mentioned, “we are always interested in learning.” When I asked whether they looked to other states they

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<sup>256</sup> “Education Chief Weighs Longer Year, Merit Pay,” *The Berkshire Eagle*, June 6, 2008.

<sup>257</sup> Peter Goonan, “Funding for Early Childhood Education in Massachusetts to Increase by \$5 million,” *The Republican*, June 18, 2008.

<sup>258</sup> The Associated Press, “Where Candidates for Governor Stand on Education,” *Associated Press State Wire*, September 3, 2014.

<sup>259</sup> Bob Salsberg, “Officials Laud Preschool, but Urge Caution to Any Expansion,” *Associated Press State Wire*, September 16, 2015.

<sup>260</sup> Michael Norton, “Poll-More than Two-Thirds Want Expanded Early Education Access,” *The Berkshire Eagle*, May 12, 2005.

responded “Absolutely” and mentioned they use any research they can.<sup>261</sup> Indeed, the Massachusetts Guidelines for Preschool Learning Experiences draws from the National Association for the Education of Young Children, the International Reading Association, and the Mass Insight Education with the Pioneer Valley Education and Business Alliance. Connecticut, Arizona, and Louisiana are cited as well in their standards.<sup>262</sup> This demonstrates that bureaucrats at the state level can choose to learn from other states.

The case studies of Tennessee, New Jersey, and Massachusetts provide insights into how out-of-state politics can bear on implementation and how internal electoral politics can also bear on implementation. The Tennessee and Massachusetts cases demonstrate that governors and legislators remain involved in the implementation process in more ways than inducing compliance from the bureaucracy. The New Jersey and Massachusetts cases also demonstrate the role of standards and bureaucratic learning in the implementation of policy. These cases raise further questions about how electoral politics and bureaucratic learning systematically affect implementation across states.

#### Data and Methods

The goal of state pre-kindergarten policies are to educate four-year-old state residents and the reach of the policy is the extent to which the state is able to offer that education to four-year-olds. For universal pre-k, policy reach is defined as the number of students enrolled in the state’s pre-k system. I have collected data from all fifty states for the years 2001-2013. This data includes the percentage of four-year-olds enrolled in state pre-k as well as other state electoral and political variables. The National Institute for Early Education Research (NIEER) at Rutgers University has been collecting data on state early childhood education environments with annual

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<sup>261</sup> Personal correspondence via phone on August 2016.

<sup>262</sup> Early Childhood Advisory Council to the Massachusetts Board of Education, “Guidelines for Preschool Learning Experiences, Massachusetts Department of Education, April 2003.

State of Preschool Yearbooks since the 2001 school year. Although some states had adopted universal pre-k before 2001, the only consistent data available for pre-k enrollment rates begins with the NIEER Yearbooks. The dependent variable is the percentage of the state's four-year-olds enrolled in state pre-k programs. This is a continuous dependent variable and, therefore, OLS regression is the most appropriate model with standard errors clustered on states.

I use the OLS model to assess the role of electoral politics and out-of-state politics on the implementation of state pre-kindergarten policies. It measures electoral politics using unified government variables and governor appointment powers of the chief education official. It assesses the role of out-of-state politics using the primary variable in diffusion studies, whether a state in the region has adopted universal pre-k.<sup>263</sup> It also includes the role of standards in expanding the reach of policy in states with targeted or universal pre-kindergarten programs. In this way we can explore one way bureaucrats can influence implementation.

Although this work uses universal pre-k as a window to explore how diffusion structures implementation, targeted programs can also experience similar dynamics. Therefore, this analysis includes all states with interaction terms to emphasize particularly important relationships for the expansion of universal pre-k programs. I use two dummy variables to control for the presence of universal pre-k and targeted pre-k. These two pre-k programs, although in the same policy area, create different electoral dynamics in expanding policy reach. Table 3.4 presents the data sources of variables used in this chapter.

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<sup>263</sup> Shipan and Volden's (2008) Learning Hypothesis is "The likelihood of a city adopting a policy *increases* when the same policy is adopted broadly by other cities throughout the state" (842). Charles Shipan and Craig Volden, "The Mechanisms of Policy Diffusion," *American Journal of Political Science* 52 (2008): 840-857. Volden's (2006) Similar States Hypothesis is "Based on competition and policy learning, states are more likely to emulate their geographic neighbors and those with similar political, demographic, and budgetary characteristics" (299). Craig Volden, "States as Policy Laboratories: Emulating Success in the Children's Health Insurance Program," *American Journal of Political Science* 50 (2006): 294-312

Table 3.4: Data Sources for Variables

| Variable                           | Source                                                          | Dates Available | Measurement                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------------------|-----------------------------------------------------------------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Dependent Variable</i>          |                                                                 |                 |                                                                                                                                                                                                                                                                                                                                                                                                         |
| % Four-Year-Olds Enrolled          | National Institute for Early Education Research                 | 2001-2013       | This includes the percentage of the state's four-year old-population enrolled in a state pre-kindergarten program.                                                                                                                                                                                                                                                                                      |
| <i>Independent Variables</i>       |                                                                 |                 |                                                                                                                                                                                                                                                                                                                                                                                                         |
| <i>State Characteristics</i>       |                                                                 |                 |                                                                                                                                                                                                                                                                                                                                                                                                         |
| Logged under 5 Population          | U.S. Census                                                     | 2001-2013       | This is the intercensal estimate of the under 5 population for each state.                                                                                                                                                                                                                                                                                                                              |
| State has UPK/Targeted Program     | National Institute for Early Education Research                 | 2003- 2013      | The NIERR Yearbook began reporting state by pre-kindergarten program status in 2003 in the state profiles section.                                                                                                                                                                                                                                                                                      |
| <i>Political Variables</i>         |                                                                 |                 |                                                                                                                                                                                                                                                                                                                                                                                                         |
| Unified Republican Government      | Ballotpedia                                                     | 2001-2013       | 1= whether a state has a unified Republican government                                                                                                                                                                                                                                                                                                                                                  |
| Unified Democratic Government      | Ballotpedia                                                     | 2001-2013       | 1= whether a state has a unified Democratic government                                                                                                                                                                                                                                                                                                                                                  |
| Appointment of Chief Ed Official   | Book of States                                                  | 2000,2002-2014  | 1=appointed by governor, appointed by governor and approved by senate, appointed by the governor and approved by the general assembly, appointed by the governor and approved by both houses, appointed by the governor and approved by either houses, appointed by the governor and approved by appropriate legislative committee and senate, appointed by governor and approved by departmental board |
| Legislative Professionalism        | Squire (2007)                                                   | 1996/2003       | Composite measure developed in Squire 2007 consisting of salary and benefits, time demands of service, and staff and resources.                                                                                                                                                                                                                                                                         |
| Election Year                      | Ballotpedia                                                     | 2000-2013       | 1= Election Year. Self-created variable                                                                                                                                                                                                                                                                                                                                                                 |
| Non-Election                       | Ballotpedia                                                     | 2000-2013       | 1= Third and Fourth Year after an Election. Self-created variable                                                                                                                                                                                                                                                                                                                                       |
| <i>Interest Groups</i>             |                                                                 |                 |                                                                                                                                                                                                                                                                                                                                                                                                         |
| Public Union Membership            | UnionStats.com                                                  | 2000-2013       | Percentage of members in a public union                                                                                                                                                                                                                                                                                                                                                                 |
| <i>Out of State Politics</i>       |                                                                 |                 |                                                                                                                                                                                                                                                                                                                                                                                                         |
| State in Region has UPK            | U.S. Census and National Institute for Early Education Research | 2000-2014       | 1=A state in the region has adopted universal pre-k. Self-created variable                                                                                                                                                                                                                                                                                                                              |
| <i>State Capacity</i>              |                                                                 |                 |                                                                                                                                                                                                                                                                                                                                                                                                         |
| Size of the Education Bureaucracy  | U.S. Census                                                     | 2000-2013       | The number of "Other Education" employees in the state                                                                                                                                                                                                                                                                                                                                                  |
| State Level Regulations- Standards | National Institute for Early Education Research                 | 2005-2014       | 1= State has early learning standards                                                                                                                                                                                                                                                                                                                                                                   |

|                 |                                    |           |                                        |
|-----------------|------------------------------------|-----------|----------------------------------------|
| General Revenue | U.S. Census and the Book of States | 2000-2013 | A state's general revenue in thousands |
|-----------------|------------------------------------|-----------|----------------------------------------|

The OLS regression on the reach of targeted and universal pre-k programs also includes relevant state characteristics. In terms of target population characteristics, I have included the logged under 5 population of each state.<sup>264</sup> This state characteristic has the potential to cut both ways for states with universal pre-k. On one hand, the more under 5 residents in the state, the more comprehensive and difficult it can be for the state to implement universal pre-k. On the other hand, the larger target population can also create greater electoral benefits for elected officials as they expand the reach of the policy. More children with more voting parents could mean that a larger under 5 population provides support and electoral pressure for officials to expand the reach of universal pre-k.

As the cases of Tennessee and Massachusetts suggest, party politics can continue to shape the expansion of policy reach. I have included both whether the state has a unified Democratic government and whether the state has unified Republican government in the regression. These two variables capture the institutional and party dynamics at the state level.<sup>265</sup> Universal and targeted pre-k programs should be expanded under unified Democratic governments more so than Republican controlled or divided governments. Universal pre-k can be an expensive policy for state government that involves expanded government reach into schools, private childcare centers, and family life. Therefore, a unified Democratic government will be more supportive and more interested in expanding the reach of universal pre-k. Similarly, a Republican controlled government will be more opposed and less invested in

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<sup>264</sup> As in Chapter 3, this variable is lagged.

<sup>265</sup> Unified government variables are lagged by one year because unified government action should affect the region of policy the following year.

expanding the reach of universal pre-k. Republicans can be opposed to universal pre-k because of its expense, its increase in government involvement in education, or because of increased government involvement in the family sphere. Following the literature, the regression also includes an election year dummy variable that indicates whether it is an election year. It also includes a dummy non-election year variable that indicates whether it was a non-election year, excluding the year after the election.<sup>266</sup>

To control for interest group involvement in implementation, I have included a measure of public union membership in each state. This measure is meant to capture the strength of the teachers' union in the state.<sup>267</sup> Although public employee unions do include other types of unions, teachers' unions are large part of the state's public union dynamics. Teachers' unions, although largely absent from the politics of adoption, might want to expand the reach of state and universal pre-kindergarten. Having students better prepared for school, both educationally and socially, can be helpful to teachers who are pressured to ensure students perform well on standardized tests. Therefore, the size of teachers' union membership could influence policy reach.

In addition to electoral dynamics, the capacity of the state to put policy into practice is important for the expansion of policy reach. I have included the state's logged general revenue from the prior year as a measure of fiscal capacity. Both universal and targeted pre-k programs are expensive as the state pays for each child's year of education. I hypothesize that states with

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<sup>266</sup> Frances Stokes Berry, "Innovation in Public Management: The Adoption of Strategic Planning," *Public Administration Review* 54 (1994): 322-330; Graeme Boushey, "Targeted for Diffusion? How the Use and Acceptance of Stereotypes Shape the Diffusion of Criminal Justice Policy Innovations in the American States," *American Political Science Review* 110 (2016): 198-214.

<sup>267</sup> Data on teachers' union membership in each state and in each year is unavailable. Using public union data was the best option for data related to union membership that was available for each state and year.

greater fiscal capacity will be in a better position to expand the reach of pre-k whether it is a targeted or universal program.

I have also included two measures of the effect of bureaucrats and bureaucratic learning on the implementation of policy. I use a dummy variable to indicate whether the state has adopted early childhood education standards. Examples of these standards are presented in Table 4.3. This measures how bureaucrats can learn from other states and apply that learning to structure implementation. States were encouraged to develop these standards after President George W. Bush's Grow Start, Grow Smart initiative in 2002. This is a significant undertaking for the state because they write and develop their own educational and social early childhood education standards. State early standards documents also demonstrate evidence of bureaucratic learning. Both New Jersey and Massachusetts' standards were built off the standards of other states. These standards are an important part of implementation because they provide information for public schools and childcare providers as to what they need to include in their pre-k classes in order to participate in the state program. This facilitates putting policy into practice throughout the state and, therefore, should help expand the reach of both targeted and universal pre-k policies. I have also included a measure of the size of the education bureaucracy.<sup>268</sup> This measure includes the number of state department of education employees that are considered part of the "other" category meaning that they are not in elementary, secondary, or higher education. Bureaucrats affect the implementation of policy. States with larger education bureaucracies should be more effective in expanding the reach of policy. Table 3.5 displays the descriptive statistics of the variables in the model.

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<sup>268</sup> As noted in Chapter 3, the U.S. Census did not have this data available for 1996. I averaged the data for 1995 and 1997 to impute data for 1996.

Table 3.5: Descriptive Statistics for the Implementation Model of all States from 2001-2013

| Independent Variables                                  | Mean or Percent | St.Dev. | Min  | Max. |
|--------------------------------------------------------|-----------------|---------|------|------|
| % Four-Year-Olds Enrolled                              | 17.15           | 19.27   | 0    | 90.6 |
| <i>Independent Variables</i>                           |                 |         |      |      |
| State has Universal Pre-k                              | 13.53           |         |      |      |
| State has targeted program (including pilot program)   | 62.99           |         |      |      |
| Logged Under 5 Population                              | 5.523           | 0.39    | 4.49 | 6.41 |
| <i>Political Variables</i>                             |                 |         |      |      |
| Unified Democratic Government                          | 22.24           |         |      |      |
| Unified Republican Government                          | 25.66           |         |      |      |
| Election Year                                          | 24.73           |         |      |      |
| Non-Election Year                                      | 50.08           |         |      |      |
| Public Union Membership                                | 32.99           | 17.98   | 4.9  | 72.4 |
| <i>Implementation Variables</i>                        |                 |         |      |      |
| Fiscal Capacity-Logged General Revenue                 | 7.24            | 0.40    | 6.36 | 8.33 |
| State Level Regulations-Standards                      | 78.69           |         |      |      |
| Size of the Education Bureaucracy                      | 1712.95         | 1314.71 | 112  | 6669 |
| Governor Appoints Education Administrative Official    | 23.17           |         |      |      |
| <i>Geographic Proximity</i>                            |                 |         |      |      |
| State in Region has UPK                                | 48.83           |         |      |      |
| <i>Interaction Variables</i>                           |                 |         |      |      |
| UPK* Logged Under 5 population                         | 0.76            | 1.94    | 0    | 6.09 |
| UPK* Unified Republican Government                     | 3.27            |         |      |      |
| UPK* Unified Democratic Government                     | 5.75            |         |      |      |
| UPK*Standards                                          | 12.75           |         |      |      |
| UPK*Governor Appoint Education Administrative Official | 2.02            |         |      |      |
| UPK*Public Union                                       | 4.83            | 14.3    | 0    | 72.4 |
| Observations                                           | 643             |         |      |      |
| <i>States with Universal Pre-k (2001-2013)</i>         |                 |         |      |      |
| Logged Under 5 Population                              | 5.65            | 0.37    | 5    | 6.09 |
| Unified Republican Government                          | 42.53           |         |      |      |
| Unified Democratic Government                          | 24.14           |         |      |      |
| Standards                                              | 90.80           |         |      |      |
| Governor Appoint Education Administrative Official     | 14.94           |         |      |      |
| Public Union                                           | 35.69           | 20.27   | 8.7  | 72.4 |
| Observations                                           | 87              |         |      |      |

The final measure of bureaucratic politics in the state is who appoints the chief education official in the state. This is important for the implementation of education policy because it structures institutional relationships both within the bureaucracy and across branches of

government.<sup>269</sup> I include a dummy variable that indicates whether the governor appoints the chief education official. Electoral politics can be part of hierarchical control and structure implementation. When the governor appoints the chief education official the state will be more likely to expand the reach of universal pre-k because putting this policy into practice is likely to garner electoral benefits for the governor. Consequently, the governor may pressure his appointees to focus their attention, energy, and resources on expanding the reach of universal pre-k. If putting the policy into practice will be harmful to the electoral interests of the governor, the governor may not exert this pressure on his appointees and the state will not be as active in expanding the reach of the policy. Targeted pre-k programs are unlikely to garner electoral benefits for the governor because the target population is smaller and less diverse. Therefore, the governor appointing the chief education official is not likely to expand policy reach. A summary of the expected direction of the variables can be seen in Table 3.6.

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<sup>269</sup> Governor Appoints Chief Education Official includes: appointed by governor, appointed by governor and approved by senate, appointed by the governor and approved by the general assembly, appointed by the governor and approved by both houses, appointed by the governor and approved by either houses, appointed by the governor and approved by appropriate legislative committee and senate, appointed by governor and approved by departmental board. In some instances, the data for this variable was missing. If the state had the same appointment method the year before and the year after the missing year, I assigned the missing year the same appointment method that existed the year prior to and after the missing year.

Table 3.6: Summary of Expected Direction of Variables

| Variable Name                                                | Measures                   | Expected Direction | Literature                                                                                         |
|--------------------------------------------------------------|----------------------------|--------------------|----------------------------------------------------------------------------------------------------|
| State Level Regulations                                      | Bureaucratic Learning      | +                  | see Rourke 1984; Carpenter 2001; Gailmard and Patty 2013; McCubbins, Noll, and Weingast 1987       |
| Size of the Education Bureaucracy                            | Bureaucratic Influence     | +                  | see Lin 2000; Edwards 1980                                                                         |
| State in Region has Universal Pre-k                          | Policy Learning            | +                  | Original to the Dissertation                                                                       |
| Unified Democratic Control                                   | Electoral Politics         | +                  | Gerber, Maestas, and Dometrius 2005; Keiser 1999; Keiser and Soss 1998                             |
| Unified Republican Control                                   | Electoral Politics         | +                  | Gerber, Maestas, and Dometrius 2005; Keiser 1999; Keiser and Soss 1998                             |
| Governor Appoints Chief Education Official (Targeted Pre-k)  | Hierarchical Control       | -                  | see Manna and Harwood 2011; Rigby and Haselswerdt 2013; Sabatier and Mazmanian 1981                |
| Governor Appoints Chief Education Official (Universal Pre-k) | Hierarchical Control       | +                  | see Manna and Harwood 2011; Rigby and Haselswerdt 2013; Sabatier and Mazmanian 1981                |
| Logged Under 5 Population                                    | State Characteristics      | Control            | see Sabatier and Mazmanian 1981, Keiser, Muesser, and Choi 2004                                    |
| Election Year/Non Election Year                              | Electoral Politics         | Control            | see Berry and Berry 1990; Boushey 2016 for its influence on adoption                               |
| Public Union Membership                                      | Interest Group Involvement | Control            | see Bardach 1977; Keiser and Miller 2010; Thompson and Scicchitano 1985; Williams and Matheny 1984 |
| Logged General Revenue                                       | State Characteristics      | Control            | see Sabatier and Mazmanian 1981, Keiser, Muesser, and Choi 2004                                    |
| State has Universal/Targeted Pre-k                           | State Program              | Control            |                                                                                                    |
| Year                                                         | Timing                     | Control            |                                                                                                    |

When a state in the region has adopted universal pre-k, states in the region will be more likely to expand the reach of their own pre-k policy. The adoption of policy in other states provides an opportunity for elected and unelected officials to learn of policy experiments in other states. They can use this learning to change the implementation of their own policies. I have included a dummy variable to indicate whether a state in the region has adopted universal pre-k. Regional proximity is often used as a measure of learning in the diffusion literature.<sup>270</sup> I do not interact this term with whether a state has universal pre-k because, in this analysis, I am not

<sup>270</sup> Please see Walker, 1969; Shipan and Volden, 2008; and Volden, 2006 for examples.

interested in the spread of the policy across states but how politics in one state can influence the reach of policy across states.

## Results

### Out-of-State Politics

My results suggest that out-of-state politics bear on the implementation of policy. The adoption of universal pre-k by a state in the region is associated with a 5.9 percent increase in the reach of a state's targeted pre-k program. This departs from diffusion scholarship that emphasizes how the adoption of policy in one state influences the adoption of policy in another state. Instead, my results suggest the adoption of universal pre-k in one state influence the implementation of policy in a non-adopting universal pre-k state. Other states' decisions are influencing the reach of policy within states because learning extends into implementation. State officials are learning about policies when adopted by regional states and they are changing the implementation of current policies to reflect the outcomes of their neighbor's policy. Using diffusion as a lens to study implementation demonstrates how out-of-state politics can influence the implementation of policy within a state through policy learning.

Table 3.7: OLS Regression on the Reach of State and Universal Pre-k Programs of all Fifty States from 2001-2013

|                                                | Coefficients        |
|------------------------------------------------|---------------------|
| <i>Independent Variables</i>                   |                     |
| State has Universal Pre-k                      | -8.68<br>(59.47)    |
| State has Targeted Pre-k                       | 7.89***<br>(1.63)   |
| Year                                           | -0.13<br>(0.30)     |
| Logged Under 5 population                      | -28.65**<br>(12.79) |
| <i>Political Variables</i>                     |                     |
| Unified Democratic Government                  | 4.36**<br>(2.05)    |
| Unified Republican Government                  | 4.39**<br>(2.17)    |
| Election Year                                  | 0.29<br>(0.33)      |
| Non-Election Year                              | -1.30<br>(0.98)     |
| Public Union Membership                        | -0.19***<br>(0.07)  |
| <i>Implementation Variables</i>                |                     |
| Logged General Revenue                         | 30.49**<br>(12.97)  |
| State Level Regulations-Standards              | 3.59**<br>(1.69)    |
| Size of the Education Bureaucracy              | 0.001<br>(0.0020)   |
| Governor Appoints Chief Education Official     | -4.99*<br>(2.56)    |
| <i>Out-of-State Politics</i>                   |                     |
| State in Region has UPK                        | 5.92**<br>(2.64)    |
| <i>Interaction Variables</i>                   |                     |
| UPK*Logged Under 5 Population                  | 6.40<br>(10.84)     |
| UPK*Unified Republican Government              | -13.65**<br>(5.10)  |
| UPK*Unified Democratic Government              | -11.48***<br>(3.11) |
| UPK*Standards                                  | 36.99**<br>(14.43)  |
| UPK*Governor Appoints Chief Education Official | 10.48**<br>(4.38)   |
| UPK*Public Union Membership                    | -0.75***<br>(0.23)  |
| Constant                                       | 203.4<br>(573.4)    |
| Observations                                   | 643                 |
| R-squared                                      | 0.657               |

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; Standard errors are clustered by state; Reference categories: state has not adopted universal pre-k, divided

government, other actors appoint chief education official or the governor is not involved, the state does not have early childhood education standards.

### Bureaucratic Learning

Learning can also occur through bureaucrats during implementation. Creating and adopting early learning standards is also associated with a 3 percent increase in enrollment in targeted pre-k programs and a 36 percent increase in enrollment in universal pre-k programs. The different size of the coefficients for targeted and universal programs is likely due to differences in the number of potentially eligible children across states. The coefficient for states with targeted programs is likely smaller because, due to eligibility requirements, there is an upward limit of how many students the pre-k program can reach. The New Jersey case study suggested that having standards was helpful for putting policy into practice. Both Massachusetts and New Jersey's early learning standards demonstrate that states create these standards based on standards in other states. The positive and significant effect of standards on reach suggests that bureaucrats are gathering information from other states and they are applying that knowledge to regulations that assist the state in expanding the reach of policy. The bureaucracy literature has shown how bureaucrats can learn and gather information from within their own departments. Bureaucrats at the state level can also learn from other states and use that learning to adjust implementation.

To assess potential bureaucratic learning, I gathered the most recent early learning standards documents from all fifty states. I used the website links to the standards in the 2014 State of Preschool Yearbook published by the National Institute of Early Education.<sup>271</sup> Of the fifty documents I gathered, thirty-seven of the states had a reference or resource page. Of those

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<sup>271</sup> W. Steven Barnett, Megan E. Carolan, James H. Squires and Kristy Clarke Brown, "The State of Preschool 2014: State Preschool Yearbook," The National Institute for Early Education Research, 2014, <http://nieer.org/yearbook>, accessed January 26, 2017. If the links did not work, I searched "state" early learning standards.

thirty-seven states, twenty-five of the states cited other states in their references page. The states and their citations can be seen in Table 3.8. There were a total of 124 out-of-state citations in the twenty-five early learning standards documents. In addition to citations, Alaska, Maryland, Montana, New Hampshire, and Rhode Island gave a special acknowledgement to other states in their standards document.

Using the lens of diffusion to understand the implementation of policy reveals how bureaucratic learning is occurring at the state level and structuring implementation. About 68 percent of the states that have references in their standards documents cite another state. This suggests that bureaucrats are learning from bureaucrats in other states and drawing on those lessons in shaping their own early learning standards. These standards are then influencing the reach of universal and targeted pre-kindergarten.

Table 3.8: Bureaucratic Learning Across States

| State          | Name of Standards                                                                                | # of State Citations |
|----------------|--------------------------------------------------------------------------------------------------|----------------------|
| Alabama        | Alabama Developmental Standards for Preschool Children                                           | 0                    |
| Alaska         | Early Learning Guidelines                                                                        | 2                    |
| Arizona        | Arizona Early Learning Standards 3rd Edition                                                     | 7                    |
| Arkansas       | Arkansas Early Childhood Education Framework Handbook                                            | 0                    |
| California     | California Preschool Learning Foundations                                                        | 1                    |
| Colorado       | Colorado Early Learning and Development Guidelines                                               | 8                    |
| Connecticut    | Connecticut Early Learning and Development Standards                                             | 15                   |
| Florida        | Florida Early Learning and Developmental Standards for Four-Year-Olds                            | 3                    |
| Idaho          | Idaho Early Learning Eguidelines                                                                 | 6                    |
| Illinois       | Illinois Early Learning and Development Standards                                                | 0                    |
| Indiana        | Indiana Early Learning Foundation                                                                | 6                    |
| Iowa           | Iowa Early Learning Standards                                                                    | 2                    |
| Kansas         | Kansas Early Learning Standards                                                                  | 3                    |
| Kentucky       | Kentucky's Early Childhood Standards                                                             | 17                   |
| Louisiana      | Louisiana's Birth to Five Year Early Learning Development Standards (ELDS)                       | 1                    |
| Maine          | State of Maine Early Childhood Learning Guidelines                                               | 4                    |
| MA             | Guidelines for Preschool Learning Experiences                                                    | 3                    |
| Michigan       | Early Childhood Standards of Quality for Prekindergarten                                         | 1                    |
| Minnesota      | Minnesota's Early Learning Standards                                                             | 0                    |
| Montana        | Montana Early Learning Standards                                                                 | 1                    |
| Nebraska       | Nebraska Early Learning Guidelines for Ages 3 to 5                                               | 0                    |
| Nevada         | Nevada Prekindergarten Standards                                                                 | 0                    |
| New Hampshire  | NH Early Learning Standards                                                                      | 2                    |
| New Jersey     | New Jersey State Department of Education Preschool Teaching and Learning Standards               | 18                   |
| New Mexico     | New Mexico Early Learning Guidelines: Birth through Kindergarten                                 | 0                    |
| New York       | New York State Prekindergarten Foundation for the Common Core                                    | 0                    |
| North Carolina | North Carolina Foundations for Early Learning and Development                                    | 0                    |
| North Dakota   | North Dakota Pre-kindergarten Content Standards                                                  | 3                    |
| Ohio           | Ohio's Early Learning and Development Standards in All Essential Domains Readiness (Birth-Age 5) | 0                    |
| Oklahoma       | Oklahoma Early Learning Guidelines for Children Ages Three Through Five                          | 8                    |
| Penn           | Pennsylvania Learning Standards For Early Childhood Pre-kindergarten                             | 1                    |
| Rhode Island   | RI Early Learning Standards                                                                      | 2                    |

|            |                                                                                             |   |
|------------|---------------------------------------------------------------------------------------------|---|
| Texas      | Texas Prekindergarten Guidelines                                                            | 0 |
| Utah       | Utah's Early Childhood Core Standards                                                       | 0 |
| Virginia   | Virginia's Foundation Blocks for Early Learning: Comprehensive Standards for Four-Year-Olds | 0 |
| Washington | Washington State Early Learning and Development Guidelines Birth through 3rd Grade          | 1 |
| Wisconsin  | Wisconsin Model Early Learning Standards Birth to First Grade                               | 6 |
| Wyoming    | Early Childhood Readiness Standards                                                         | 3 |

## Electoral Politics

Electoral politics also plays an important role in the implementation of policy. Electoral politics should operate differently in implementation depending on whether the state is implementing a targeted or universal program. Adopting universal programs can be politically advantageous because these programs provide benefits for all state residents, no matter their socio-economic background. However, in putting policy into practice, universal programs can be difficult because the potential reach of the program is larger and the target population is so much larger, requiring significant state effort. However, implementing a universal program can also be electorally advantageous because it can garner more support since upper class, upper-middle class, and middle class residents can participate in the program.<sup>272</sup>

For states with targeted pre-k programs, unified state governments facilitate the expansion of pre-k programs more so than divided governments. Both unified Republican and unified Democratic governments are associated with enrolling about 4 percent more students in their pre-k programs than divided governments. This suggests that when one party controls the

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<sup>272</sup> Seventy percent of Americans support using federal money “to make sure high quality preschool programs are available to every American.” Furthermore, 41 percent of respondents making less than 36,000 dollars a year and those making 90,000 or more said pre-k education was extremely important. Jeffrey M. Jones, “In U.S. 70% Favor Federal Funds to Expand Pre-k Education,” Gallup.com, September 8, 2016, <http://www.gallup.com/poll/175646/favor-federal-funds-expand-pre-education.aspx>, accessed February 1, 2017. Fifty-nine percent of respondents agreed with the proposal to “enact free universal child care and pre-kindergarten programs for all children.” Fifty-three percent of respondents making 90,000 dollars a year or more support this proposal. “Americans Buy Free Pre-k; Split on Tuition Free College,” Gallup, May 2, 2016, <http://www.gallup.com/poll/191255/americans-buy-free-pre-split-tuition-free-college.aspx>, accessed February 1, 2016.

state, the branches of government are better able to coordinate their efforts to expand the reach of these programs. However, among states with universal pre-k policies, unified Democratic and unified Republican state governments enroll eleven and thirteen percent fewer students than divided state governments. This demonstrates that electoral pressures are different when implementing targeted and universal programs. The size of a universal program can make it more difficult for unified governments when faced with implementing the program.

Unified state governments influence the implementation of policy differently than the adoption of policy. There are different electoral dynamics and pressures that elected officials face during the implementation of policy that they might not confront in the adoption of policy.<sup>273</sup> I expected that Democrat controlled governments would be active in expanding a universal education program. However, although they support universal pre-k's adoption, implementation brings new electoral risks. These risks may be associated with Democrat controlled state governments being associated with more spending or support from teachers' unions. Because of the association with more spending Democrats may be punished for expanding the reach of an expensive program. Furthermore, the results show that public union membership is associated with enrolling fewer .2 percent fewer students in targeted programs and .7 percent fewer students universal pre-k programs. Democrats, allies of teachers' unions, might face political push back from the teachers' unions if students are attending private

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<sup>273</sup> For a discussion of differences in politics during adoption and implementation please see Evelyn Z. Brodtkin. Implementation as Policy Politics. In *Implementation and the Policy Process: Opening Up the Black Box*, Dennis J. Palumbo and Donald J. Calista (eds). (Westport, CT: Greenwood Press, 1990) and Eric Patashnik, *Reforms at Risk: What Happens After Major Policy Changes are Enacted* (Princeton, NJ: Princeton University Press, 2008). For evidence for how party control of state government can affect implementation and the implementation of non-education policies please see Lael R. Keiser, "State Bureaucratic Discretion and the Administration of Social Welfare Programs: The Case of Social Security Disability," *Journal of Public Administration Research and Theory: J-Part 9* (1999): 101. For examples of how party control may not influence every aspect of implementation please see Lael R. Keiser and Joe Soss, "With Good Cause: Bureaucratic Discretion and the Politics of Child Support Enforcement," *American Journal of Political Science*, 42 (1998): 1133-1156.

childcare centers or if K-12 funding is being limited to fund pre-k.<sup>274</sup> Further research needs to be conducted to determine whether teachers' unions view early education as competing against K-12 funding, how this may influence elected officials, and what percentage of public union membership consists of teachers' union membership. Democratically controlled governments can gain electoral advantages for adopting certain policies, but might suffer electoral consequences once they put the policy into practice.

The results also reveal that electoral politics can shape implementation through hierarchical control. In states where the governor appoints the chief education official expand the reach of the universal pre-k more so than states that use other means of appointing their chief education official. Having the governor appoint the chief education official is associated with enrolling ten percent more students in a universal pre-k program and five percent fewer students in a targeted program. The cases from Chapter 2 suggested that the relationship between governors and their appointees affected policy. In Georgia, Governor Miller tried to maximize the control of his appointees over the pre-k funding and Governor Spitzer in New York created a Children's Cabinet to explore pre-k issues. Residents from all income backgrounds can reward governors for expanding the reach of universal pre-k.<sup>275</sup> It is beneficial for governors when they are associated with expanding education in the state and helping children access education services as well as assist working families by providing pre-k. Therefore, governors exert pressure on their appointees to expand the reach of policy that is helpful for their re-election chances. Hierarchical control does not have the same effect on targeted pre-kindergarten programs because it engages fewer students and parents. Therefore, it is not as likely to provide

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<sup>274</sup> Please note public union membership is a proxy for teachers' union membership. More research needs to explore the relationship between teachers' union strength and early education policy.

<sup>275</sup> See footnote 272 for polling information.

broad electoral benefits to the governor. In a state with a targeted pre-k program, governors are less likely to direct their appointees to expand the state pre-kindergarten program.

We would expect that Democrat controlled states and states with more powerful teachers' unions would be more likely to both adopt and implement a universal pre-k policy. However when studying the moment of adoption, we assume that a party, elected officials, or an interest group that supported a policy during adoption continues that support in the new venue of implementation. This regression clearly demonstrates that it would be premature to make this assumption. Instead, electoral politics and interest group politics continues to influence expanding the reach of policy. Studying implementation as compliance or as dispositions ignores the variety of ways elected politicians can use their positions and influence to shape implementation.

### Conclusion

Considering state level variation in policy implementation changes the way we think of outside political factors bearing on implementation. This analysis suggests that the adoption of policy by states in a region can structure the implementation of similar policies in other states. The analysis also reveals that bureaucrats are learning across state borders and this learning is bearing on implementation. Bureaucracy scholars have established that bureaucrats can learn and can influence implementation. However, they have not considered how state-level bureaucrats can learn from their colleagues in other states.

These dynamics demonstrate how policy and bureaucratic learning can support states as they expand the reach of their policies. Early learning standards, developed by learning from other states, enhance the implementation of pre-kindergarten policies. States operating as laboratories of bureaucracy can support states operating as laboratories of democracy when

bureaucrats use their learning to implement the policies elected officials adopted. With regard to state pre-kindergarten policies, policy and bureaucratic learning across states helped extend the reach of policy in a state.

The lens of diffusion provides leverage to consider how out-of-state politics structures implementation, how state-level bureaucrats are participating in the policy process, and how they learn from both within and across state departments. Differences in implementation lead to new questions about how implementation can bear on the diffusion process and how bureaucrats are involved in this process. The next chapter asks whether differences in implementation affect subsequent adoptions? If so, do bureaucrats remain involved in this process?

## CHAPTER 4: HOW OUT-OF-STATE IMPLEMENTATION BEARS ON ADOPTION

### Introduction

The policymaking process is oftentimes treated as steps in a sequential process. Agenda setting occurs before adoption, then implementation happens after adoption, and once implementation occurs a program can be evaluated. Incorporating implementation into diffusion invites us to think outside this traditional, sequential process. What if one stage of the policy process influences a *different* stage of the policy process in *another* state? Chapter 3 demonstrated that the adoption of policy in one state can influence the implementation of a different policy in another state. But another question arises when we think about the policy process during diffusion. What if one stage in the policy process influences a different, and often treated as antecedent, stage of the policy process in another state? This chapter investigates how the implementation of policy in one state can influence the adoption of policy in another state.

The effect of out-of-state politics on state policy adoption and implementation is important because it reveals new dimensions in the state policymaking process. The study of diffusion has treated state policymaking as laboratories of democracy. The evidence presented in this dissertation suggests that internal electoral politics do play a role in state policymaking, but that out-of-state politics and bureaucrats are also driving forces in the adoption and implementation of diffusing policies. The previous chapter demonstrated that out-of-state politics can bear on the implementation of policy within states and bureaucrats are learning from other states and influencing implementation. This supports my initial assertion that states are operating as laboratories of bureaucracy in addition to laboratories of democracy.

The effect of out-of-state politics and bureaucratic learning on implementation has important consequences for how we think about diffusion. First, diffusion clearly has more

extensive consequences than we previously realized. When we incorporate implementation into our analysis we see that the adoption of policy influences the implementation of different policies in states that never adopted the diffusing policy. Therefore, learning from policy experiments extends into policy implementation and can enhance policymaking across states. Second, bureaucrats are participating in policy learning, a primary mechanism of diffusion. Unelected officials are learning from other states as they create regulations that shape implementation within their own states. In these ways, states are operating as laboratories of bureaucracy.

In this chapter, I ask whether out-of-state implementation bears on policy adoption and how bureaucrats are influencing adoption. In the next section I discuss why out-of-state implementation would bear on adoption, then I review the model from Chapter 2, introduce a new model including a measure of out-of-state implementation, and I conclude by discussing the role of bureaucrats in the state policymaking process.

### Why Would Implementation Influence Adoption?

The implementation of diffusing policies can bear on adoption because states freely choose to adopt diffusing policies and are one of the important implementing authorities. This is an important dynamic because it means that state elected and bureaucratic officials are critical actors in the adoption and implementation of diffusing policies. Although the federal government may be providing incentives for states to adopt certain policies, state officials are choosing to adopt or implement a policy. These dynamics can make the adoption and implementation of state-created policy risky. Therefore, states are not only going to look to other states to learn about the existence of policies. Instead, they are also going to consider how

and whether states implemented the policies before they take the risk of adopting the policy themselves.

Implementation can structure policy adoption because of policy learning. The spread of policy is facilitated by four mechanisms: learning, competition, imitation, and coercion.<sup>276</sup>

Diffusion scholarship tends to focus on the mechanism of learning as a primary reason for states to adopt the same policy as other states. Other states' implementation of diffusing policy provides more information and more opportunities for state officials to learn. Therefore, there is no reason why state actors could not learn from both the adoption and implementation of policy. States can learn that other states have adopted a policy, but they can also learn whether the state faced a difficult or smooth implementation process. This chapter argues that policy learning drives diffusion because state officials learn from other states' implementation of the diffusing policy, not only the adoption of policy.

Studying the role of implementation in policy learning changes how we think about policy learning itself because it changes who we think participates in learning. Bureaucrats are primary actors in implementation and they may gather information to develop bureaucratic expertise.<sup>277</sup> They can gather information from policy experiments within their own departments<sup>278</sup> and, as Chapter 3 demonstrated, they can gather information from other states and use that information to implement policies within their state. Bureaucrats can also use information to influence elected officials and policy adoption at the federal level.<sup>279</sup> I extend

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<sup>276</sup> Charles Shipan and Craig Volden, "The Mechanisms of Policy Diffusion," *American Journal of Political Science* 52 (2008): 840-857.

<sup>277</sup> Francis E. Rourke, *Bureaucracy, Politics, and Public Policy*, (Brown Little, 1984),

<sup>278</sup> Daniel Carpenter, *The Forging of Bureaucratic Autonomy: Reputations, Networks, and Policy Innovation in Executive Agencies, 1863-1928* (Princeton, NJ: Princeton University Press, 2001).

<sup>279</sup> Ibid.

Carpenter's (2001) work on bureaucratic autonomy to bureaucrats working at the state level.<sup>280</sup> I argue bureaucrats at the state level also gather information and provide information to legislators. When we consider implementation as part of the information used in policy learning, we also have to consider how the primary actors in implementation, bureaucrats, could be learning from other states' policy experiments. Out-of-state implementation shapes subsequent adoption because other states' implementation provides information to bureaucrats and elected officials that they use when considering policy adoption.

As described in Chapter 3, I continue to conceptualize implementation as policy reach. Policy reach is a form of implementation and entails how and whether the state spreads a policy within its borders. The goals of a policy are defined during policy adoption. However, state actors determine the reach of the policy during implementation. Therefore, the reach of the policy can be different across states that have adopted the same policy. These differences can influence subsequent adoption because the reach of a policy is a source of information for states considering adopting the policy.

Scholars have begun to incorporate implementation into their analysis, but they continue to treat implementation as independent of and as succeeding adoption. Andrew Karch and Matthew Cravens (2014) compare states' implementation of policy when states have *already* adopted the same policy.<sup>281</sup> Even so, they continue to focus on how elected officials modify laws. Similarly, Henry Glick and Scott Hayes (1991) study how states *change* the policy during implementation and how those changes are reflected in subsequent adoptions.<sup>282</sup> Volden (2006)

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<sup>280</sup> My work departs from Carpenter (2001) because I treat bureaucrats and their actions as compatible with the preferences of elected officials.

<sup>281</sup> Andrew Karch and Matthew Cravens, "Rapid Diffusion and Policy Reform: the Adoption and Modification of Three Strikes Laws," *State Politics & Policy Quarterly* 14 (2014): 461-491.

<sup>282</sup> Henry R. Glick and Scott P. Hays, "Innovation and Reinvention in State Policymaking: Theory and the Evolution of Living Will Laws," *The Journal of Politics* 53 (1991): 835-850.

uses a measure of policy success to argue the mechanism emulation is more likely to occur when a policy has been successful.<sup>283</sup> What these studies have not considered is how the out-of-state implementation of a diffusing policy can bear on states' decisions to adopt the policy and, therefore, the pattern of diffusion itself. In this scenario, implementation does not simply occur after a policy has diffused. Instead, the implementation of policy is shaping the diffusion pattern itself.

Implementation can bear on adoption through the primary diffusion mechanism, which is learning. Figure 1 from Chapter 1 demonstrates how the diffusion process has been conceptualized in the past. Policy learning is when one state learns about a policy innovation from another state and decides to adopt the policy.<sup>284</sup> The diffusion literature restricts this mechanism to operating during a discrete moment in time, despite the fact that learning is more likely to occur over time in the international setting.<sup>285</sup> There is evidence to suggest that, at the international level, policy effectiveness is part of policy learning during the diffusion process. When a reform is more effective, OECD countries are more likely to adopt the policy innovation.<sup>286</sup> Therefore, the implementation of policy in other countries influenced whether other states adopted the policy and, therefore, the pattern of diffusion.

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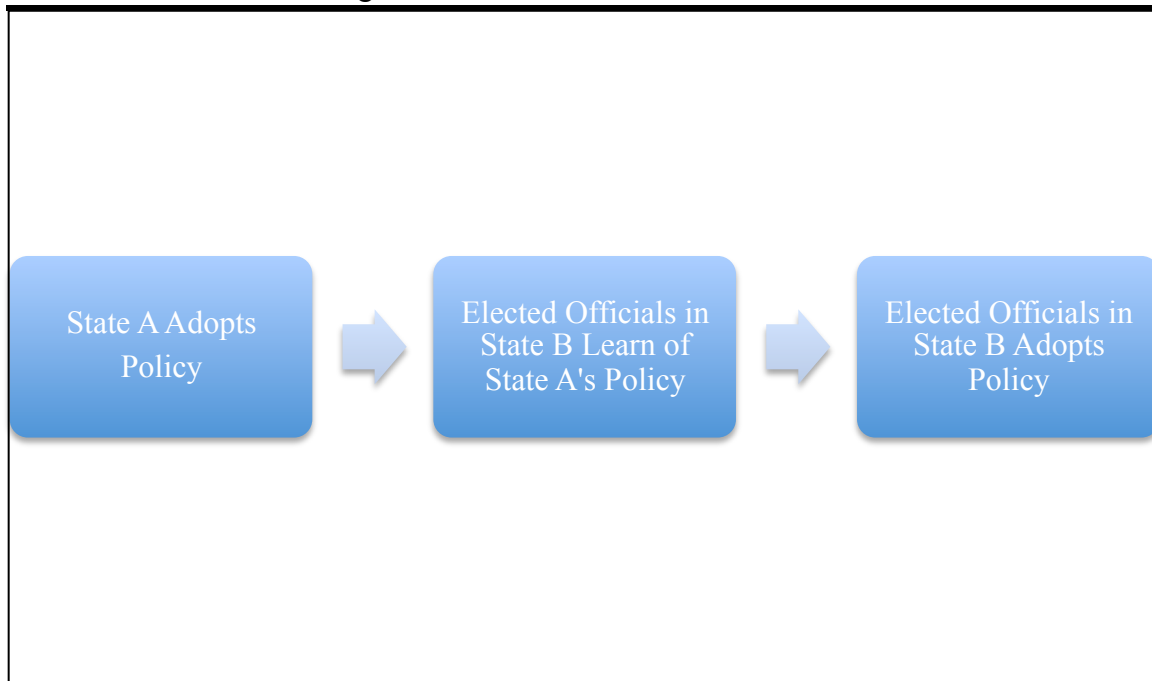
<sup>283</sup> Craig Volden, "States as Policy Laboratories: Emulating Success in the Children's Health Insurance Program," *American Journal of Political Science* 50 (2006): 294-312.

<sup>284</sup> Shipan and Volden 2008.

<sup>285</sup> Dabrizio Gilardi, Katharina Fuglister, Stephane Luyet, "Learning from Others: The Diffusion of Hospital Financing Reforms in OECD Countries," *Comparative Political Studies* 42(4): 549-573.

<sup>286</sup> Ibid.

Figure 1: Conventional Diffusion Process

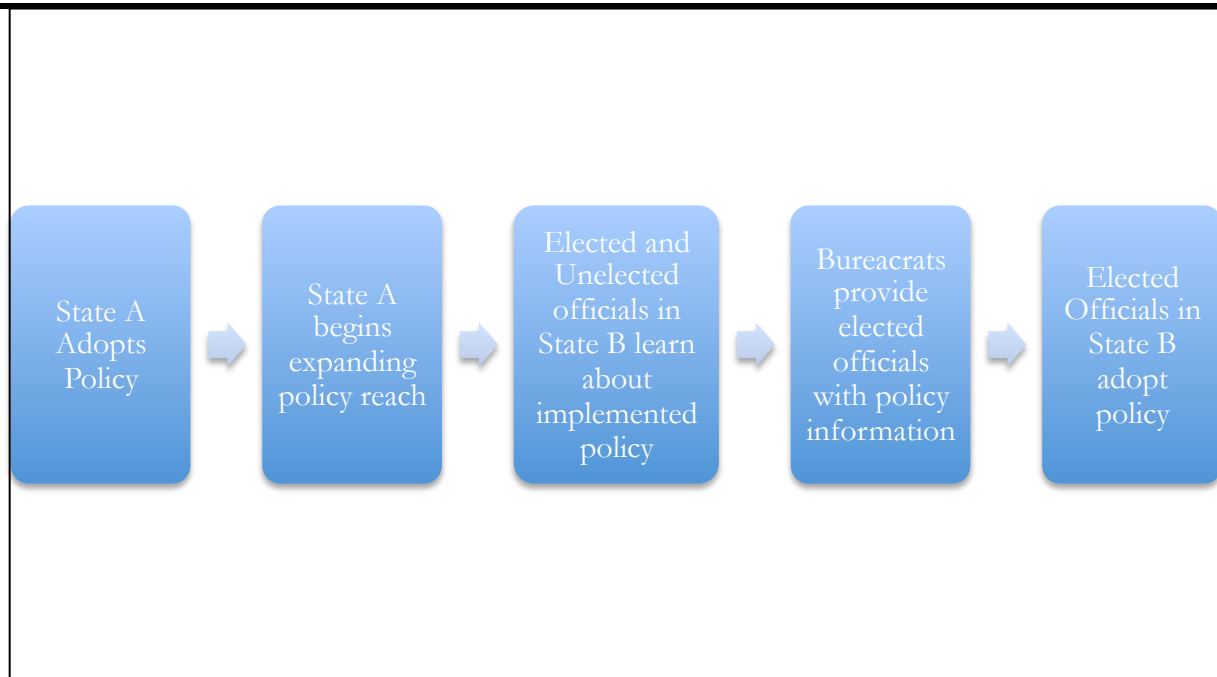


Just as policy effectiveness can influence policy learning, expanding policy reach can also influence diffusion through learning. Expanding the reach of policy makes the policy more visible which increases the likelihood that another state would learn about the policy. The expansion of policy reach can also makes a policy less risky for the state considering adoption. When a state is able to expand the reach of a policy, another state can learn about the plausibility and possibility of adoption and implementation within its own borders. Essentially, implementation provides information for states considering adoption. In this way, states can learn from both the adoption of a policy and a state's experience in implementing a policy during diffusion.

As seen in Figure 1, scholarship assumes that State B is learning from State A based on a discrete moment in time, the moment of adoption. However, during this process, State A is either expanding the reach of a policy or restricting the reach of a policy. State A's implementation experience can inform State B of the different difficulties it might face as it goes

about adopting and implementing a policy. Clearly, State B can incorporate information about how and whether State A is expanding or restricting policy reach into their decision to adopt a policy.

Figure 3: Diffusion with Bureaucratic Learning



A states' expansion of policy may work through learning to affect whether a state adopts a policy. Because bureaucrats are primary actors in implementation, they should also draw lessons from other states' implementation. As Chapter 3 demonstrated, bureaucrats learn across state lines. After gathering this information, they can present the information to elected officials as they consider policy adoption. Therefore, a more accurate depiction of the spread of policy is seen above in Figure 2 from Chapter 1. In this scenario, State A adopts a policy and begins to expand the policy's reach. Elected and unelected officials in State B learn from State A's experience of implementing the policy. Unelected officials then provide this information to elected officials and elected officials are in State B are more likely to adopt the policy. Just as

learning is more likely to occur across states with similar characteristics,<sup>287</sup> the effect of implementation on adoption will also be more likely when State A and State B are similar. Overall, expanding the reach of policy indicates that implementation is less risky and, therefore, State B will be more likely to adopt the policy.

States can also learn when states do not expand the reach of their policies. If State A adopts a policy but does not expand the reach of policy, State B will be less likely to adopt the policy. Without expanding the reach of the policy, State B will be less likely to learn about the policy and will use that information to choose to not adopt the policy. For example, South Carolina could adopt a policy but neglect to expand the reach of policy. Tennessee is less likely to know about the policy if this happens. Furthermore, even if Tennessee learns about the policy, Tennessee will be less likely to adopt the policy because South Carolina's experience provides information on the potential challenges of implementing the policy.

In these scenarios, the ways in which a state expands or does not expand the reach of a policy structures policy learning, which, in turn, bears on adoption. The adoption of a policy can communicate limited information to another state. It can communicate certain electoral risks, interest group support/opposition, and constituency support/opposition. However, it cannot communicate the risks or benefits as the state begins to take action to put policy into practice throughout the state. In these ways, the implementation of policy provides information to elected and unelected officials that can influence whether states adopt diffusing policies.

### Model and Variables

As in Chapter 2, this chapter uses a Cox Proportional Hazards model to explain the adoption of universal pre-kindergarten. It is appropriate to use Event History Analysis because

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<sup>287</sup> For example, see Volden's (2006) discussion of budget similarities across states.

diffusion is time dependent. The Cox Proportional Hazards model is commonly used in diffusion studies because of the nature of state-year data. The Cox Proportional Hazards model is more appropriate than other models in Event History Analysis because it makes less strict assumptions about the shape of the data.

Table 4.1: Adoption of Universal Pre-k by Year

| State         | Year of Adoption |
|---------------|------------------|
| Georgia       | 1995             |
| New York      | 1997             |
| Oklahoma      | 1998             |
| Florida       | 2002             |
| West Virginia | 2002             |
| Massachusetts | 2005             |
| Illinois      | 2006             |
| Iowa          | 2007             |
| Vermont       | 2014             |

Source: Author's table generated with data from the  
National Institute for Early Education Research

The dependent variable is state adoption of universal pre-k, which has been gathered from the National Institute for Early Education Research. The dataset is organized so that each state receives a 1 when they adopt the policy and then are dropped from the dataset for subsequent years. Leaving states in the dataset would be inappropriate because their adoption would be over counted. The analysis includes state-year data from 1995-2014. Because universal pre-k was first adopted in 1995, states were not at risk to adopt the policy until 1995.

In order to test the hypothesis that out-of-state implementation bears on adoption, I use the same dataset from Chapter 2. This dataset consists of state political, bureaucratic, and implementation variables for each of the fifty states from 1995 to 2014. Table 4.2 shows the Cox Proportional Hazards model I used in Chapter 2 to predict the adoption of universal pre-kindergarten. This analysis uncovered that internal political and implementation variables matter for the diffusion of policy. States with unified Democratic governments and more professional

legislatures were more likely to adopt universal pre-kindergarten. This was expected since Democrats should be more supportive of a universal educational policy that expands government intervention. Similarly, legislative professionalism is a measure of legislative capacity which makes it easier for states to participate in policy learning. Therefore, more professional legislatures should be more likely to engage in policy learning and adopt a policy such as universal pre-k.

This analysis also uncovered that internal implementation dynamics and bureaucrats matter for whether states adopt diffusing policies. Larger education bureaucracies and more bureaucratic expertise are associated with an increased likelihood of adopting universal pre-k. This analysis confirmed the hypothesis that internal implementation dynamics matter for adoption because states are a primary implementing authorities when adopting state-created, diffusing policies. This chapter, however, focuses on how implementation in *other* states can influence whether a state adopts a diffusing policy.

Table 4.2: Cox Proportional Hazards Model on the Adoption of Universal Pre-k from Chapter 2

|                                          | Model 1A         |                  | Model 1B             |                      |
|------------------------------------------|------------------|------------------|----------------------|----------------------|
|                                          | Coefficients     | Hazard           | Coefficients         | Hazard               |
| <b>Independent Variables</b>             |                  |                  |                      |                      |
| <i>Traditional Diffusion Variables</i>   |                  |                  |                      |                      |
| Unified Democratic Government            | 1.78**<br>(0.87) | 5.92**<br>(5.12) | 2.06**<br>(0.84)     | 7.85**<br>(6.61)     |
| Legislative Professionalism              | 0.02<br>(0.02)   | 1.02<br>(0.02)   | 0.12*<br>(0.07)      | 1.13*<br>(0.08)      |
| Election Year                            | 0.38<br>(0.80)   | 1.46<br>(1.17)   | 0.75<br>(0.83)       | 2.12<br>(1.75)       |
| Non-Election Year                        | -0.28<br>(0.86)  | 0.76<br>(0.65)   | 0.24<br>(0.97)       | 1.27<br>(1.23)       |
| Public Union Membership                  | 0.01<br>(0.03)   | 1.01<br>(0.03)   | 0.01<br>(0.03)       | 1.01<br>(0.03)       |
| % of Residents with Bachelor's Degree    | -0.14<br>(0.13)  | 0.87<br>(0.11)   | -0.12<br>(0.15)      | 0.89<br>(0.13)       |
| # of States in the Region with UPK       | -0.26<br>(0.23)  | 0.77<br>(0.18)   | -0.46<br>(0.30)      | 0.63<br>(0.19)       |
| <i>Internal Implementation Variables</i> |                  |                  |                      |                      |
| Size of Education Bureaucracy            |                  |                  | 0.002***<br>(0.0004) | 1.002***<br>(0.0005) |
| Bureaucratic Expertise                   |                  |                  | 0.21**<br>(0.09)     | 1.23**<br>(0.11)     |
| Logged General Revenue                   |                  |                  | -7.26***<br>(2.78)   | 0.001***<br>(0.002)  |
| Observations                             | 900              |                  | 900                  |                      |
| Log Psuedolikelihood                     | -49.068806       |                  | -39.868258           |                      |
| Wald Chi2 (7)                            | 13.48            |                  |                      |                      |
| Wald Chi2 (10)                           |                  |                  | 32.86                |                      |
| Wald Chi2 (12)                           |                  |                  |                      |                      |
| Prob > Chi2                              | 0.0612           |                  | 0.0003               |                      |

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; Standard errors are clustered by state; Reference categories: divided or Republican controlled government, non-election year, election year or the year after, state in region does not have universal pre-k, state does not have early childhood education standards.

In order to understand whether out-of-state implementation structures adoption, I include two additional independent variables in the analysis. The first additional variable I include is called out-of-state leader implementation. This variable includes the percentage of the state's

four-year-olds that are enrolled in the ‘leader’ state’s universal pre-k program. The leader state in diffusion research is considered the first state to have adopted the policy. I have also included a variable called out-of-state follower implementation that includes the percentage of four-year-olds enrolled in the universal pre-k program of the second state in the region to have adopted universal pre-k. I continue to use the four U.S. Census regions to determine the leader and follower states in a region. These two out-of-state implementation variables indicate the effect of policy reach on the subsequent adoption of policy.

The percentage of a states’ four-year-old population enrolled in universal pre-kindergarten is the most appropriate measure of policy reach. Universal pre-kindergarten policies define their goal as educating the state’s four-year-olds, just as a K-12 education policy’s goal is to educate the state’s five to eighteen-year-old population. Expanding the reach of universal pre-kindergarten policy means spreading a policy so that any four-year-old in the state can participate in the pre-kindergarten policy.

These measures were gathered from the National Institute for Early Education Research’s (NIEER) Annual Pre-k Yearbook as well as from the National Center for Education Statistics and the U.S. Census. NIEER began collecting this data from the 2001-2002 school year. However, Georgia, Oklahoma, and New York adopted universal pre-k prior to 2001. To compensate for this lack of information, I used the U.S. Census’ under 5 population for each state and divided the population by 5. Taking that number as the number of four-year-olds in the state, I divided it by the number of pre-k students in the state reported by the National Center for Education Statistics. This gave me an estimate of general pre-kindergarten enrollment rates in Georgia, Oklahoma, and New York prior to 2001. Table 4.3 displays the variable sources and descriptions.

Table 4.3: Data Sources for Variables

| Variables                                    | Sources                                                                 | Dates Available      | Measurement                                                                                                                                                                                           |
|----------------------------------------------|-------------------------------------------------------------------------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Political Variables</i>                   |                                                                         |                      |                                                                                                                                                                                                       |
| Unified Democratic Government                | Ballotpedia/National Council of State Legislatures                      | 1993-2014            | 1=Unified Democratic Government, 0= Divided or Unified Republican Government                                                                                                                          |
| Legislative Professionalism                  | Squire (2007)                                                           | 1996/2003            | Composite measure developed in Squire 2007 consisting of salary and benefits, time demands of service, and staff and resources.                                                                       |
| Election Year                                | Ballotpedia                                                             | 1990-2014            | 1= Election Year                                                                                                                                                                                      |
| Non-Election Year                            | Ballotpedia                                                             | 1990-2014            | 1= Third and Fourth Year after an Election                                                                                                                                                            |
| <i>State Characteristics</i>                 |                                                                         |                      |                                                                                                                                                                                                       |
| Membership in Public Union                   | UnionStats.com                                                          | 1990-2014            | Percentage of members in a public union                                                                                                                                                               |
| % of Residents with Bachelors Degree         | U.S. Census and American Fact Finder                                    | 1990-2014            | Percent of persons 25 years and over that have completed 4 years of college or more                                                                                                                   |
| <i>Geographic Proximity</i>                  |                                                                         |                      |                                                                                                                                                                                                       |
| State in Region has Adopted UPK              | U.S. Census Regions and National Institute for Early Education Research | 1990-2014            | 1=A state in the region has adopted universal pre-k                                                                                                                                                   |
| <i>Implementation Variables</i>              |                                                                         |                      |                                                                                                                                                                                                       |
| Education Bureaucracy                        | US Census Government Employment and Payroll                             | 1992-1995, 1997-2014 | The number of "Other Education" employees in the state                                                                                                                                                |
| Bureaucratic Expertise                       | NIEER                                                                   | 2005-2014            | This is a measure of the number of years it took the state to adopt early learning standards after the 2002 Good Start, Grow Smart Initiative.                                                        |
| Logged General Revenue                       | U.S. Census                                                             | 1990-2014            | A state's general revenue in thousands                                                                                                                                                                |
| <i>Out-of-State Implementation Variables</i> |                                                                         |                      |                                                                                                                                                                                                       |
| Out-of-State Leader Implementation           | NIEER                                                                   | 2001-2013            | This is the percent of a state's four-year-old population enrolled in the first state in the region to have adopted universal pre-k. Please see Table 5.3 for how this was calculated prior to 2001.  |
| Out-of-State Follower Implementation         | NIEER                                                                   | 2001-2013            | This is the percent of a state's four-year-old population enrolled in the second state in the region to have adopted universal pre-k. Please see Table 5.3 for how this was calculated prior to 2001. |

Table 4.4 presents those estimates as well as the first year of enrollment data from the National Institute for Early Education Research. The estimates seem comparable to the enrollment data from NIERR. We would expect that policy reach would expand over time and we see this in Table 5.3. It is possible that Georgia's estimates are underestimated. Georgia is the leader state for the South. Therefore, this could bias the estimates in a negative direction. The two out-of-state implementation variables have been lagged so that the enrollment in Georgia's universal pre-k program in the 2001-2002 school year is used to explain whether a state adopts universal pre-k in 2002.

| Table 4.4: Enrollment Data |      |      |      |      |      |      |      |
|----------------------------|------|------|------|------|------|------|------|
|                            | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
| Georgia                    | 11.7 | 20.4 | 22.8 | 25.7 | 26.5 | 26.3 | 53.4 |
| New York                   |      |      | 12.3 | 12.9 | 15.7 | 15.2 | 24.6 |
| Oklahoma                   |      |      |      | 5.42 | 36.1 | 44.3 | 55.6 |

I also included the variable called bureaucratic expertise. Chapter 3 demonstrated that states are learning from other states when adopting early learning childhood standards. George W. Bush's Good Start, Grow Smart initiative in 2002 was an impetus for states to create early learning standards. As described in Chapter 2, this measure includes the time it took states to adopt early learning standards in comparison to the 2002 Good Start, Grow Smart initiative. I added 16 to the variable in order to create a positive variable with a range from 0 to 27. I recoded the variable so that the last state to adopt standards received a 0.<sup>288</sup> The most bureaucratic expertise exists in states that adopted standards even before 2002. These states include Arkansas, Colorado, Connecticut, Georgia, Michigan, Minnesota, New Jersey, New York, Oklahoma, Texas, and Utah.

<sup>288</sup> Please note that when the model includes a dichotomous variable with 1 indicating a state has adopted early learning standards the variable does not reach statistical significance.

I include similar variables from my analysis in Chapter 2. This includes whether the state is under unified Democratic control and the level of legislative professionalism in the state. Both of these variables were positive and statistically significant in the prior analysis. Even with the addition of the out-of-state implementation variables, these variables should remain positive and statistically significant. The Democratic Party should be more likely to adopt a universal education program. Similarly, more professional legislatures are better able to participate in policy learning and more likely to adopt policy innovations. I have also controlled for the election year. I included Election Year as a dummy variable that indicates whether the year is an election year. A second variable, called Non-Election Year, is a dummy variable indicating that it is not the year of an election or the year after the election. Diffusion scholarship has emphasized the importance of electoral politics and timing in the adoption policy.<sup>289</sup> However, these two variables were statistically insignificant in the prior analysis. Table 4.5 presents a summary of the variables and their expected directions.

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<sup>289</sup> See Frances Stokes Berry and William D. Berry, “State Lottery Adoptions as Policy Innovations: An Event History Analysis,” *American Political Science Review* 84 (1990): 395-415.; Graeme Boushey, “Targeted for Diffusion? How the Use and Acceptance of Stereotypes Shape the Diffusion of Criminal Justice Policy Innovations in the American States,” *American Political Science Review* 110 (2016): 198-214.

Table 4.5: Summary of Expected Direction of Variables

| Variable Name                         | Measures                              | Expected Direction | Literature                                                                                                                                 |
|---------------------------------------|---------------------------------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Unified Democratic Government         | Party Politics                        | +                  | see Berry and Berry 1990; Grossback, Nicholson-Crotty, and Peterson 2004; Volden, 2006, Shipan and Volden, 2006 and Shipan and Volden 2008 |
| Legislative Professionalism           | Propensity to Learn                   | +                  | see Shipan and Volden 2012                                                                                                                 |
| Size of the Education Bureaucracy     | Bureaucratic Influence                | +                  | see Rourke 1984; Carpenter 2001; Teodoro 2009                                                                                              |
| Bureaucratic Expertise                | Bureaucratic Learning                 | +                  | Original to the Dissertation                                                                                                               |
| Out-of-State Leader Implementation    | Policy Learning                       | +                  | Original to the Dissertation                                                                                                               |
| Out-of-State Follower Implementation  | Policy Learning                       | +                  | Original to the Dissertation                                                                                                               |
| Election Year/Non-Election Year       | Electoral Timing                      | Control            | see Berry and Berry 1990; Boushey 2016                                                                                                     |
| % of Residents with Bachelor's Degree | State Characteristics                 | Control            | see Berry and Berry 1990; Grossback, Nicholson-Crotty, Peterson 2004; Hero and Preuhs 2007; Shipan and Volden 2006                         |
| Membership in Public Union            | Interest Group Involvement            | Control            | see Keiser and Miller 2010; Thompson and Scicchitano 1985; Williams and Matheny 1984                                                       |
| Logged General Revenue                | Fiscal Capacity/State Characteristics | Control            | see Berry and Berry 1990; Grossback, Nicholson-Crotty, Peterson 2004; Hero and Preuhs 2007; Shipan and Volden 2006                         |
| # State in Region has Universal Pre-k | Policy Learning                       | Control            | see Shipan and Volden 2008; Volden, 2006; Walker, 1969                                                                                     |

I have also included a measure of teachers' union strength in each state using the proxy measure of the percentage of public union employees in each state. Teachers' unions might be supportive of universal pre-k because it is more likely that students will be ready for school when they enter kindergarten. I control for the possible effect of teachers' unions by including a measure of public union membership in the model. I have also included the percentage of state residents with a bachelor's degree, which is a measure of educational attainment in the state. More educated populations may be more likely to value and, thus, support education in the state. This provides electoral support for elected officials who want to adopt universal pre-k in the state. Neither the proxy measure of teachers' union strength or educational attainment was

statistically significant in the prior analysis. Table 4.6 presents the summary statistics for the diffusion model.

| Table 4.6: Descriptive Statistics for Diffusion Model of All States 1995-2014 <sup>290</sup> |           |          |      |      |
|----------------------------------------------------------------------------------------------|-----------|----------|------|------|
|                                                                                              | Mean or % | St. Dev. | Min. | Max. |
| <b>Independent Variables</b>                                                                 |           |          |      |      |
| <i>Political Variables</i>                                                                   |           |          |      |      |
| Unified Democratic Government (1= Unified Democratic Government)                             | 18.11     |          |      |      |
| Legislative Professionalism                                                                  | 17.65     | 11.19    | 2.7  | 62.6 |
| Election Year (1= Election Year)                                                             | 26        |          |      |      |
| Non-Election Year (1= Third or Fourth Year after an Election)                                | 47.56     |          |      |      |
| Public Union Membership                                                                      | 33.03     | 17.46    | 2.7  | 73.1 |
| <i>State Characteristics</i>                                                                 |           |          |      |      |
| % of Residents with Bachelors Degree                                                         | 25.71     | 4.93     | 11.4 | 38.7 |
| <i>Geographic Proximity</i>                                                                  |           |          |      |      |
| No State in Region as Universal Pre-k                                                        | 45.89     |          |      |      |
| One State in Region has Universal Pre-k                                                      | 13.67     |          |      |      |
| Two States in Region has Universal Pre-k                                                     | 22.33     |          |      |      |
| Three States in Region has Universal Pre-k                                                   | 0.78      |          |      |      |
| Four State in Region has Universal Pre-k                                                     | 17.33     |          |      |      |
| <i>Implementation Variables</i>                                                              |           |          |      |      |
| Size of the Education Bureaucracy                                                            | 1640.55   | 1294.24  | 74   | 6603 |
| Bureaucratic Expertise                                                                       | 9.73      | 4.075    | 0    | 27   |
| Logged General Revenue                                                                       | 7.14      | 0.41     | 6.25 | 8.34 |
| <i>Out-of-State Implementation Variables</i>                                                 |           |          |      |      |
| Out-of-State Leader Implementation                                                           | 18.79     | 21.57    | 0    | 60.2 |
| Out-of-State Follower Implementation                                                         | 17.73     | 27.49    | 0    | 76.4 |

## Analysis

### Out-of-State Implementation

<sup>290</sup> I am unable to include the logged under 5 population in each state as an independent variable to measure the size of the target population. Because the under 5 population was used to calculate enrollment data for Georgia, Oklahoma, and New York prior to 2001, I have excluded this variable from the analysis.

The results of the Cox Proportional Hazard model support the hypothesis that out-of-state implementation bears on adoption. When the leader state in a region enrolls more students in their universal pre-k program, states in that region are twenty-seven percent more likely to adopt universal pre-k. To put this effect in perspective, the effect of out-of-state leader implementation is larger than the effect of having a more professional legislature. This indicates that the implementation of the leader state has a significant and positive effect on the diffusion of policy. If anything, imputing enrollment data for Georgia and New York would have biased the estimates in a negative direction. Although this effect is positive and significant for the leader states' implementation, the follower states' implementation is not significantly related to policy adoption. Following the diffusion literature, this reiterates the importance of the leader state in policy diffusion. Not only do they lead by adopting the policy, they also provide the first implementation information to other states. Just as the diffusion literature considers the adoption of policy by the leader state important for the pattern of diffusion, the implementation of policy by the leader state is also statistically and substantively significant for subsequent adoption of policy because it provides information for policy learning.

As expected, states use the information provided by out-of-state implementation when participating in policy learning. It is not that states look to leader states to learn about the existence of the policy, but they look to leader states to learn about the possibility and plausibility of policy implementation. After incorporating other states' implementation of universal pre-k, it is clear that implementation matters for whether states in a region adopt policy. The adoption of policy can provide limited information to other states in a region about the risks and benefits of adopting the policy. Instead, how and whether states in the region

implement the policy communicates critical information to a state about the benefits and risks of adopting a state-created policy.

Geographic proximity plays a much more dynamic role in the adoption and implementation of policy than past diffusion research has suggested. As demonstrated in Chapter 2, geographic proximity was not significantly related to policy adoption. This would suggest that states are not learning from their neighbors when adopting universal pre-kindergarten. However, the results of the full model in Chapter 4 reveal that geographic proximity does structure diffusion, but through a different pathway. Instead of states learning about policies merely from policy adoption, states learn from the regional leader's implementation of the policy. Therefore, diffusion is structured by the implementation of diffusing policy because it provides information for other states to participate in policy learning.

Geographic proximity is also important in facilitating policy learning during the implementation of policy. As seen in Chapter 3, states are more likely to expand their targeted pre-kindergarten policy when a state in the region has adopted universal pre-kindergarten. It remains unclear whether policy learning during implementation is influencing states to actively choose to be non-adopters. Recent studies have minimized the role of geographic proximity in diffusion;<sup>291</sup> however, my results suggest geographic proximity remains critical to adoption because the implementation of policy in nearby states provides information for learning. Similarly, geographic proximity to states who have adopted the diffusing policy structures the implementation of different policies. Geographic proximity continues to influence both adoption and implementation.

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<sup>291</sup> Please see Charles R. Shipan and Craig Volden, "Policy Diffusion: Seven Lessons for Scholars and Practitioners," *Public Administration Review*, 72 (2012): 788-796.

Table 4.7: Cox Proportional Hazards Model of the Diffusion of Universal Pre-k of all Fifty States from 1995-2014

|                                            | Model 1A         |                  | Model 1B             |                      | Model 1C           |                    |
|--------------------------------------------|------------------|------------------|----------------------|----------------------|--------------------|--------------------|
|                                            | Coeff.           | Hazard           | Coeff.               | Hazard               | Coeff.             | Hazard             |
| <b>Independent Variables</b>               |                  |                  |                      |                      |                    |                    |
| <i>Traditional Diffusion Variables</i>     |                  |                  |                      |                      |                    |                    |
| Unified Democratic Government              | 1.78**<br>(0.87) | 5.92**<br>(5.12) | 2.06**<br>(0.84)     | 7.85**<br>(6.61)     | 1.93*<br>(1.02)    | 6.90*<br>(7.01)    |
| Legislative Professionalism                | 0.02<br>(0.02)   | 1.02<br>(0.02)   | 0.12*<br>(0.07)      | 1.13*<br>(0.08)      | 0.13*<br>(0.08)    | 1.14*<br>(0.09)    |
| Election Year                              | 0.38<br>(0.80)   | 1.46<br>(1.17)   | 0.75<br>(0.83)       | 2.12<br>(1.75)       | 1.06<br>(0.91)     | 2.87<br>(2.60)     |
| Non-Election Year                          | -0.28<br>(0.86)  | 0.76<br>(0.65)   | 0.24<br>(0.97)       | 1.27<br>(1.23)       | -0.09<br>(-1.31)   | 0.92<br>(1.20)     |
| Public Union Membership                    | 0.01<br>(0.03)   | 1.01<br>(0.03)   | 0.01<br>(0.03)       | 1.01<br>(0.03)       | -0.02<br>(0.06)    | 0.98<br>(0.06)     |
| % of Residents with Bachelor's Degree      | -0.14<br>(0.13)  | 0.87<br>(0.11)   | -0.12<br>(0.15)      | 0.89<br>(0.13)       | -0.10<br>(0.13)    | 0.91<br>(0.12)     |
| # of States in the Region with UPK         | -0.26<br>(0.23)  | 0.77<br>(0.18)   | -0.46<br>(0.30)      | 0.63<br>(0.19)       | -4.32**<br>(2.07)  | 0.01**<br>(0.03)   |
| <i>Internal Implementation Variables</i>   |                  |                  |                      |                      |                    |                    |
| Size of Education Bureaucracy              |                  |                  | 0.002***<br>(0.0004) | 1.002***<br>(0.0005) | 0.002**<br>(0.001) | 1.002**<br>(0.001) |
| Bureaucratic Expertise                     |                  |                  | 0.21**<br>(0.09)     | 1.23**<br>(0.11)     | 0.27***<br>(0.06)  | 1.31***<br>(0.08)  |
| Logged General Revenue                     |                  |                  | -7.26***<br>(2.78)   | 0.001***<br>(0.002)  | -6.08<br>(3.73)    | 0.002<br>(0.01)    |
| <i>Policy Learning from Implementation</i> |                  |                  |                      |                      |                    |                    |
| Out-of-State Leader Implementation         |                  |                  |                      |                      | 0.24***<br>(0.09)  | 1.27***<br>(0.11)  |
| Out-of-State Follower Implementation       |                  |                  |                      |                      | -0.005<br>(0.05)   | 0.995<br>(0.05)    |
| Observations                               | 900              |                  | 900                  |                      | 900                |                    |
| Log Psuedolikelihood                       | -49.06881        |                  | -39.86826            |                      | -30.13765          |                    |
| Wald Chi2 (7)                              | 13.48            |                  |                      |                      |                    |                    |
| Wald Chi2 (10)                             |                  |                  | 32.86                |                      |                    |                    |
| Wald Chi2 (12)                             |                  |                  |                      |                      | 388.28             |                    |
| Prob > Chi2                                | 0.0612           |                  | 0.0003               |                      | 0.000              |                    |

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; Standard errors are clustered by state; Reference categories: divided or Republican controlled government, non-election year, election year or the year after, state in region does not have universal pre-k, state does not have early childhood education standards, other actors appoint chief education official. Please note the Log Psuedolikelihood's final value has been rounded due to table formatting.

## Bureaucrats

Consistent with the model in Chapter 2, bureaucrats and bureaucratic expertise continues to influence policy adoption. States with more bureaucrats are more likely to adopt universal pre-k. As in Chapter 2, an increase of 1,000 employees associated with a 2 percent increase in the likelihood of adopting the policy. Bureaucratic expertise is also associated with an increased likelihood of adopting universal pre-kindergarten. States who adopted standards sooner are about 31 percent more likely to adopt universal pre-kindergarten.

Bureaucrats can affect policy adoption by providing information to legislators. Bureaucrats' information is a primary issue in the principal-agent theories of the legislature and bureaucracy. Bureaucrats have more information than elected officials and this creates asymmetry.<sup>292</sup> Bureaucrats can use this information to affect policy adoption.<sup>293</sup> As one legislator noted, "I meet with the department during session once a week, I have a standing meeting on Tuesday mornings individually with a couple of representatives from the department who sit down and go over things with me, answer my questions. I get to ask them questions, get information."<sup>294</sup> In a later interview when I asked whether bureaucrats request to provide him with information he said "the simple answer to that question is yes but that's rare" and went on to explain that "when the topic comes up, if there is legislation or an idea that is being floated or has been filed dealing with pre-k, affecting pre-k either positively or negatively then that's when typically I will hear from departments, bureaucrats about issues or information in support or

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<sup>292</sup> Please see Mathew D. McCubbins, Roger G. Noll, and Barry R. Weingast, "Administrative Procedures as Instruments of Political Control," *Journal of Law, Economics, & Organization* 3 (1987): 243-277 and Sean Gailmard and John W. Patty, *Learning While Governing: Expertise and Accountability in the Executive Branch*, (Chicago, IL: Chicago University Press, 2013) for more on bureaucratic information.

<sup>293</sup> Carpenter, 2001.

<sup>294</sup> Interview with a legislator, interview number 1, via phone in July 2017.

opposition to whatever the idea is at the moment.”<sup>295</sup> Another legislator responded about bureaucrats expressing support or opposition to legislation saying “usually it’s in committee, they try to take care of things early on. And yes, probably weekly they will stop by, here is the calendar, here are the bills, you know we don’t have a position on these five bills, we are against these two for these reasons and we are really strongly in support of this bill.”<sup>296</sup>

Bureaucrats are playing a role in both the implementation and the adoption of policy. They can use information from within their department or from across states and present that information to elected officials making adoption decisions. The diffusion literature has focused exclusively on elected officials and how they can learn across states. Bureaucrats can learn across states as well and they can provide information to legislators. Diffusion scholarship has explored the role of policy networks, policy entrepreneurs, and interest groups in facilitating diffusion. However, my findings build on this by showing how bureaucrats are also critical actors in the process.

### Electoral Politics

The effect of party politics on the diffusion of policy remains important in the diffusion model. States with unified Democratic governments are seven times more likely to adopt universal pre-kindergarten. This further supports the diffusion literature’s emphasis on the role of electoral politics in the diffusion of policy. The effect of legislative professionalism remains positive. However, it barely reaches statistical significance. Although legislative professionalism is treated as a form of state capacity that helps states participate in learning,<sup>297</sup> it seems that policy is learning is occurring without the effect of legislative professionalism. This

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<sup>295</sup> Interview with a legislator, interview number 16, via phone January 2017.

<sup>296</sup> Interview with a legislator, interview number 17, via phone January 2017. Four of the six follow-up interviews supported that bureaucrats provide information to elected officials. The response rate for the interviews prevent me from using the interview data is systematic evidence.

<sup>297</sup> See Shipan and Volden (2012) for a discussion of legislative professionalism as state capacity.

raises further questions about which state officials are participating in learning during the diffusion process.

The analysis demonstrates that policy diffusion is not simply about the adoption of policy. Instead, implementation is integral in the spread of policies across states. Although some diffusion research has begun to consider implementation, they consistently conceptualize implementation as something that occurs after a policy has spread. My analysis suggests that implementation is involved in the adoption decision of states and, therefore, should be fully incorporated into our study of policy adoption and the study of diffusion. It is not only that the adoption of an innovation by a leader state can bear on whether other states adopt the same policy innovation, but whether that leader state expands the reach of policy. Implementation does not occur after diffusion. Instead, out-of-state implementation is an integral part of the process because it provides information for unelected and elected officials to participate in policy learning.

### Conclusion

I began this chapter by asking: does out-of-state implementation bear on adoption? The analysis in the chapter suggests that out-of-state implementation bears on whether states adopt a policy through the mechanism of policy learning. When the leader state in the region expands the reach of policy, states in that region are more likely to adopt the policy. Implementation provides more information for state officials to learn from before deciding whether to adopt a policy. In this way, implementation is a fundamental part of the spread of policies.

This analysis has broad implications for how we think about adoption, implementation, diffusion, and the policy process more generally. First, it suggests that the policy process is much more intertwined than researchers have theorized. Phases of the policy process that are

conceptualized as preceding adoption can actually influence other states' adoption. This means that we need to consider how other phases can bear on preceding phases. We can ask how and whether adoption structures policy design? We can also ask how the policy evaluation process might influence agenda setting? Conceptualizing the policy process in this way opens up new research avenues on how politics in one stage of the policy process can influence other stages of the policy process.

Second, this analysis calls into question the diffusion scholars' exclusive focus on the adoption of the policy. This focus is missing critical political dynamics and political actors when answering fundamental questions of how and why policies spread across governments. Since the implementation of policy structures the process of diffusion, we need to reconsider past diffusion studies. This analysis also pushes the field to not treat policy adoption, or any part of the policy process, as an independent silo. Politics in different stages of the process and in different states are influencing the adoption and implementation of policy. Future research needs to consider how these other politics could be bearing on the political or policy phenomenon they are studying.

The analysis in this chapter and the previous chapters suggests states are acting as laboratories of bureaucracy. This dissertation has demonstrated out-of-state politics bears on implementation, out-of-state implementation bears on adoption, bureaucrats are affecting whether states adopt policies, and bureaucrats are learning across states. By considering the role of implementation and bureaucrats in the diffusion of policy, my results suggest states are indeed acting as laboratories of bureaucracy. The concluding chapter takes up the issue of democratic governance and diffusion as well as recommends future directions for research.

## CONCLUSION

The federal structure of the United States has provided space for states to become policy innovators. This dynamic has led states to be described as democratic laboratories. States as democratic laboratories means that elected officials within states can create policy innovations or adopt other states' policy innovations in response to the needs and preferences of their constituents. This enhances democratic governance because citizens in states can choose their own policies for themselves, through their representatives. Policymaking closer to constituents may contribute to democratic governance.

This dissertation calls this dynamic into question by considering how states can operate as both laboratories of bureaucracy and laboratories of democracy. Bureaucrats are critical state actors who learn from other states, change the implementation of state policies to reflect that learning, and influence which policies elected state officials adopt. In this way, unelected officials in other states and unelected officials within states are structuring policymaking within states.

If bureaucrats have an active role in the adoption of policy and the implementation of policy, how can state policymaking complement democratic governance? My findings indicate bureaucrats can enhance democratic governance in two ways. First, when bureaucrats learn from other states and apply that learning to their own states' implementation they are better able to achieve the goals of the policy elected officials adopted. Both bureaucratic learning from standards and general policy learning from policy adoption in other states supports states as they put their policies into practice. Second, bureaucrats influence the adoption of policy and provide information for policy adoption. Bureaucrats deepen the process of policy learning by providing

the information legislators use when choosing the appropriate policies for their state. In these two ways bureaucrats may enhance democratic governance.

However, future research should explore the questions of how, when, and under what conditions states operating as laboratories of bureaucracy may support or limit democratic governance. Under certain conditions, bureaucratic learning may not support democratic governance. Bureaucrats may gather policy lessons from other states and apply those lessons in a way that subverts the intentions of elected officials. If bureaucrats are opposed to the state's policy, they may use learning to protect their organizational interest by either re-directing implementation to achieve their own policy goals or by delaying implementation. The conditions under which states operating as laboratories of bureaucracy may or may not complement democratic governance is an important avenue for continued research.

#### Review of the Framework

My dissertation argues that out-of-state policy adoption bears on implementation within states and out-of-state implementation bears on adoption within states. This occurs through the mechanism of policy learning. Policy learning influences the implementation of policy and the adoption of policy is influenced by learning from other states' implementation of policy. Elected policymakers are not the only actors participating in policy learning. Bureaucrats also learn from other states as states adopt and implement policy innovations. Bureaucrats, in turn, use this learning to shape the implementation of policy within their states and influence elected officials as they choose to adopt policies.

I have used universal pre-kindergarten policies to assess how out-of-state politics bears on policy adoption and implementation during the diffusion process. Universal pre-kindergarten is a state-created, state-adopted policy with a clear policy reach. States adopting universal pre-

kindergarten are adopting a policy whereby any and all four-year-olds in the state are welcome to participate in a pre-kindergarten education. This policy has diffused across states, but has diffused differently within states. States have expanded the policy differently because of internal electoral politics, hierarchical control, and the presence of early learning standards. Policy reach is an exciting form of implementation to study because it views elected officials as more than principals and bureaucrats as more than agents in the principal-agent relationship. Instead, elected officials are more active in the implementation of state-created, state-adopted policies. Early learning standards are also structuring the implementation of both targeted and universal pre-kindergarten policies across states. Bureaucrats participated in bureaucratic learning while developing these standards. Bureaucrats used other states' standards to develop their own and those standards have important consequences for the reach of pre-kindergarten policies.

Out-of-state politics has also influenced states with targeted pre-kindergarten as they work to expand the reach of their pre-k programs. This suggests that policy learning occurs during implementation as well as adoption. States are innovating in their implementation of policy based on the policies their neighbors adopt. By learning from other states' policy experiments, states are better able to implement their own policies. Therefore, learning among elected and unelected officials during implementation is supporting democratic governance among states.

My dissertation also argues that out-of-state implementation and bureaucrats bear on the adoption of policy, which shapes the diffusion pattern. How states implement diffusing policies matters for the subsequent spread of the policy because it provides information for policy learning. State officials can learn about the existence of a policy from policy adoption, but they learn about the implications of adopting that policy by learning from other states'

implementation experiences. Bureaucrats are also important actors in the adoption of policy at the state level. Bureaucrats can shape policy adoption at the federal level,<sup>298</sup> but they can also shape adoption within states. Bureaucrats can support democratic governance during adoption by enhancing policy learning among elected officials.

Answering the questions of whether and how implementation is part of the diffusion process has raised many further research questions. In the next section I discuss some of the questions that arise from this dissertation for future scholars to explore.

### Future Research

The argument and findings in this dissertation suggests a number of additional research questions that scholars of democracy, federalism, and policy should assess. These research questions fall into three categories. First, the dissertation raises questions about the relationship between policy learning and federalism. Second, questions remain about how states operating as laboratories of bureaucracy bear on policy outcomes. Third, future scholars can extend the theoretical framework to other policy areas.

### Federalism

Although diffusion largely focuses on the spread of policies across state governments, there has been some research on how localities participate in diffusion as well.<sup>299</sup> However, questions remain about the extent to which localities participate in diffusion and which actors at the local level are facilitating this process. Researchers could uncover that localities generally reflect the dynamics at the state level or they could discover that diffusion looks very different at

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<sup>298</sup> Daniel Carpenter, *The Forging of Bureaucratic Autonomy: Reputations, Networks, and Policy Innovation in Executive Agencies, 1863-1928* (Princeton, NJ: Princeton University Press, 2001).

<sup>299</sup> Please see Charles Shipan and Craig Volden, "Bottom-Up Federalism: The Diffusion of Antismoking Policies from U.S. Cities to States," *American Journal of Political Science* 50 (2006): 825-843 and Daniel M. Butler, Craig Volden, Adam M. Dynes, and Boris Shor, "Ideology, Learning, and Policy Diffusion: Experimental Evidence," *American Journal of Political Science* 61(2017): 37-49.

the local level. Furthermore, these differences could be more or less democratic. Localities could be more responsive to citizens because citizens are closer to the elected and unelected officials involved in the process. However, because of low election turnout, elected and unelected officials might be operating on their own as they experiment with policies. Further research on diffusion and policy learning at the local level is needed to understand whether our theories of state-level diffusion are appropriate for diffusion at the local level.

One of the primary contributions of this dissertation is the extension of Carpenter's (2001) work to state-level bureaucrats. The implementation and bureaucracy literatures have largely examined the role of federal-level officials and street-level bureaucrats without considering the role of out-of-state politics.<sup>300</sup> State-level bureaucrats are much closer to state residents than federal officials, but at the same time they are more removed than street-level officials. Studying state-level bureaucrats exposes a new layer of variation for researchers to explore. This is particularly important as states have begun to be described as executive-dominated systems.<sup>301</sup> My findings suggest state-level bureaucrats may learn and influence adoption and implementation of policy. Other theories of bureaucracies should be applied to state-level officials to examine whether these theories explain bureaucracy and bureaucratic action at the subnational level.

In this line of thought, federalism, bureaucracy, and diffusion scholars should begin to ask questions about policy learning in the bureaucracy and across levels of government. My

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<sup>300</sup> For exceptions please see Kenneth J. Meier and Laurence J. O' Toole Jr. *Bureaucracy in a Democratic State: A Governance Perspective* (Baltimore, MD: The Johns Hopkins University Press, 2006); Lael R. Keiser, "State Bureaucratic Discretion and the Administration of Social Welfare Programs: The Case of Social Security Disability," *Journal of Public Administration Research and Theory: J-Part 9* (1999): 87-107; Lael R. Keiser and Joe Soss, "With Good Cause: Bureaucratic Discretion and the Politics of Child Support Enforcement," *American Journal of Political Science*, 42 (1998): 1133-1156.

<sup>301</sup> Graeme T. Boushey and Robert J. McGrath, "Experts, Amateurs, and Bureaucratic Influence in the American States," *Journal of Public Administration and Theory* 27 (2017): 85-103.

findings demonstrate that state-level bureaucrats learn from bureaucrats in other states. There are many resources for learning because there are forty-nine other, similar bureaucracies. However, scholars of federal bureaucracies have assumed that federal bureaucrats learn from within their departments. States have many departments that are similar to departments at the federal level. Questions remain about whether federal bureaucrats are learning from their counterparts at the state level and whether state-level bureaucrats learn from federal-level bureaucrats. My findings suggest bureaucrats learn from sources outside of their departments. This idea could extend to studies of the bureaucracy at the federal, state, and local levels.

### Policy Outcomes

The second set of questions my research raises is about the impact of laboratories of bureaucracy on policy outcomes. Scholars of bureaucracy have explored how bureaucrats shape policy outcomes.<sup>302</sup> However, it remains unclear whether bureaucrats' involvement in the policy adoption and implementation of diffusing policies can enhance policy outcomes. In the case of state pre-kindergarten, the early learning standards developed by bureaucrats helped states expand the reach of both targeted and universal pre-kindergarten programs. Early learning standards are one way in which bureaucrats can influence the implementation of policy. Future research should explore how other bureaucratic decisions and bureaucratic learning shaped outcomes at the state level. Looking sub-nationally can provide variation to better assess our theories of how bureaucrats shape policy outcomes.

It also remains unclear whether information provided by bureaucrats and information by policy entrepreneurs have different effects on the types of policies legislatures adopt.

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<sup>302</sup> For an example please see Susan Moffitt, *Making Policy Public: Participatory Bureaucracy in American Democracy*, (Cambridge University Press, 2014); Pamela J. Clouser McCann, "Agency Discretion and Public Health and Service Delivery," *HSR: Health Services Research* 44(2009): 1897-1908; Michael Sances, "The Distributional Impact of Greater Responsiveness: Evidence From New York Towns." *Journal of Politics* 78 (2016): 105-119.

Bureaucrats provide legislators with relevant information when determining whether to adopt a policy. Policy entrepreneurs and interest groups can also provide legislators with information. Future research should explore instances when this information converges, when it diverges, and how these dynamics bear on policy adoption and implementation. These are all exciting research avenues for future projects.

Another question that the diffusion literature has not answered is whether diffusion leads to better policy outcomes for state residents. Because diffusion scholars focus on the moment of adoption, they bypass implementation as well as policy outcomes. Elected officials participating in policy learning does not necessarily mean that the policy outcomes are acceptable to the states' citizens. By ignoring implementation, outcomes, and de-adoption processes, the diffusion literature has overlooked the connection between adopting policies and policy outcomes. It would be interesting for future research to examine when policy learning did not create acceptable policy outcomes to citizens and what the political and policy consequences were as a result. Essentially, we can ask in what ways citizens hold elected and unelected officials accountable for policy learning after the initial adoption of diffusing policies.

### Generalizability

The third set of questions that arise from this dissertation center on generalizability. How are bureaucrats in other departments involved in implementation? Does bureaucratic learning occur among bureaucrats in other policy areas? I use the policy of universal pre-kindergarten in this dissertation but my theoretical framework is applicable to the spread of all state-created, state-adopted policies.

Out-of-state politics bearing on the adoption and implementation of policy is not restricted the early education policy or even education policy. Policies in all areas need to be

adopted in some manner and need to be implemented in some manner. Therefore, if more than one state is adopting and implementing the same policy, we can use the theoretical framework developed in Chapter 1 to examine the role of out-of-state politics and bureaucrats in state policymaking.

Bureaucratic learning, innovation, and involvement in adoption are not constrained to bureaucrats in education policy. The work of Carpenter (2001) examines bureaucratic learning and autonomy in multiple departments. Furthermore, state legislators are responsible for legislating on a multitude of topics and require information on these topics. Legislators will need information from many departments because of their breadth of legislative responsibility. Therefore, we can expect bureaucrats in all departments to provide information critical to legislators' decisions to adopt or not adopt policies.

The evidence in this dissertation demonstrates a primary way bureaucrats engaged in learning was through the development of early learning standards. Again, this is generalizable as developing standards for a state program is a common responsibility among bureaucracies. Bureaucracies across content areas develop standards, guidelines, and regulations for state policies and programs. Therefore, bureaucratic learning in early learning standards is just one example of a larger bureaucratic phenomenon. Additionally, although I use early learning standards in this dissertation, bureaucrats engage in a host of other activities. There are many other ways for bureaucrats to learn across states. These elements of out-of-state politics and bureaucratic learning suggest my theoretical framework could be applied to many other state policies.

Laboratories of Bureaucracy

This dissertation argues for re-conceptualizing policy diffusion to include implementation. Incorporating implementation into diffusion changes the actors we consider critical to the process of diffusion. Instead of studying elected officials, it invites us to consider how unelected officials are participating in policy learning. In doing so, it raises new concerns about whether states are acting as laboratories of democracy. Looking beyond the moment of adoption changes the way we think about state policymaking.

I have argued that implementation is a fundamental part of the diffusion process. Both internal implementation politics and out-of-state implementation politics structure policy adoption. Out-of-state implementation provides rich information for state officials to learn from the policy experiments in other states. This changes our understanding of policy learning by recognizing how other parts of the policy process can be used when learning from other states. Using policy adoption as the only measure for policy learning ignores the varied sources of information available to state officials.

Thinking about how implementation bears on adoption also invites us to consider the role of primary implementing actors on adoption. Bureaucrats within states can structure the diffusion process through their influence on policy adoption. Bureaucrats can gather information and provide that information directly to elected officials making adoption decisions. Therefore, as they learn from both within their department and across departments, they are fundamental actors in the spread of policy from one government to another.

I have also argued that out-of-state adoption bears on the implementation of policy within states. Just as out-of-state adoption matters for whether states adopt policies, out-of-state adoption provides an opportunity for states to learn from policy experiments in neighboring states. This changes how we think about the mechanism of learning and when it occurs. By

focusing exclusively on adoption, past studies have not considered how the main mechanism in diffusion, policy learning, continues to operate in other parts of the policy process.

Another way out-of-state politics bear on implementation is through bureaucratic learning. As shown in Chapter 3, bureaucrats in one state learn from bureaucrats in other states. They use this information in ways that change the implementation of policy within their states. This also changes the way we think about policy learning because it indicates that unelected officials, in addition to elected officials, can participate in this mechanism. Bureaucrats are active policy learners and they use this learning to influence adoption and implementation.

The findings of this dissertation disagree with the conception of states as democratic laboratories. Instead, this dissertation shows how states can act as laboratories of bureaucracy and laboratories of democracy. States as laboratories of bureaucracy supports democratic governance. Bureaucrats can use their policy learning to fulfill the policy goals their elected officials adopted. Instead of forcing compliance, scholars should focus on how bureaucrats can enhance democratic governance by learning across states. Bureaucrats also support democratic governance by giving legislators information to use in their adoption decisions. Instead of seeing this information as a power asymmetry, scholars should continue to explore how information among bureaucracies is used to bolster democratic governance. States are acting as laboratories of bureaucracy and these laboratories are enhancing democratic governance across the United States.

## Bibliography

- “Advanced Placement-All High Schools/Districts Required to Offer AP.” Education Commission of the States, <http://ecs.force.com/mbdata/MBQuestRT?Rep=AP0116>, accessed December 4, 2016.
- “Advanced Placement Policies-All State Profiles.” Education Commission of the States, <http://ecs.force.com/mbdata/mbprofgroupall?Rep=APA>, accessed December 4, 2016.
- Allen, Russ and Clark, Jill. “State Policy Adoption and Innovation: Lobbying and Education.” *State and Local Government Review* 13, no. 1 (1981): 18-25.
- “Americans Buy Free Pre-k; Split on Tuition Free College,” *Gallup*, May 2, 2016, <http://www.gallup.com/poll/191255/americans-buy-free-pre-split-tuition-free-college.aspx>.
- AP Report, “State Agency Opens Office to Handle Preschool Funding and Oversight.” *Chattanooga Times Free Press* (Chattanooga, TN), July 12, 2005.
- Atkeson, Lonna Rae, Yann P. Kerevel, R. Michael Alvarez, and Thad E. Hall. “Who Asks for Voter Identification? Explaining Poll-Worker Discretion.” *The Journal of Politics* 76, no. 4 (2014): 944-957.
- Bailey, Michael, and Mark Carl Rom. “A Wider Race? Interstate Competition across Health and Welfare Programs.” *The Journal of Politics* 66, no. 2 (2004): 326-347.
- Bali, Valentina A. “Implementing Popular Initiatives: What Matters for Compliance?” *The Journal of Politics* 65, no.3 (2003): 1130-1146.
- Balla, Steven. “Interstate Professional Associations and the Diffusion of Policy Innovations.” *American Politics Research* 29, no. 3 (2001): 221-245.
- Bardach, Eugene. *The Implementation Game: What Happens After a Bill Becomes a Law*. Cambridge: The MIT Press, 1977.
- Barnett, W. Steven, and Donald J. Yarosz. “Who Goes to Preschool and Why does it Matter.” National Institute for Early Education Research Policy in Brief, November 2007.
- Berry, Frances Stokes, and William D. Berry. “State Lottery Adoptions as Policy Innovations: An Event History Analysis.” *American Political Science Review* 84, no. 2 (1990): 395-415.
- Berry, Frances Stokes. “Innovation in Public Management: The Adoption of Strategic Planning.” *Public Administration Review* 54, no. 4 (1994): 322-330.
- Berry, William D., Richard C. Fording, and Russell L. Hanson. “Reassessing the ‘Race to the

- Bottom' in State Welfare Policy." *The Journal of Politics* 65, no. 2 (2003): 327-349.
- Boehmke, Frederick J., and Richard Witmer. "Disentangling Diffusion: The Effects of Social Learning and Economic Competition on State Policy Innovation and Expansion." *Political Research Quarterly* 57, no.1 (2004): 39-51.
- Boushey, Graeme. *Policy Diffusion Dynamics in America*. New York: Cambridge University Press, 2010.
- Boushey, Graeme. "Targeted for Diffusion? How the Use and Acceptance of Stereotypes Shape the Diffusion of Criminal Justice Policy Innovations in the American States." *American Political Science Review* 110, no. 1 (2016): 198-214.
- Boushey, Graeme T., and Robert J. McGrath. "Experts, Amateurs, and Bureaucratic Influence in the American States." *Journal of Public Administration and Theory* 27, no. 1 (2017): 85-103.
- Brodkin, Evelyn Z. "Implementation as Policy Politics." In *Implementation and the Policy Process: Opening Up the Black Box*, edited by Dennis J. Palumbo and Donald J. Calista, 107-118. Westport, CT: Greenwood Press, 1990.
- Bushouse, Brenda K. *Universal Preschool: Policy Change, Stability, and the Pew Charitable Trusts*. Albany: SUNY Press, 2009.
- Butler, Daniel M., Craig Volden, Adam M. Dynes, and Boris Shor. "Ideology, Learning, and Policy Diffusion: Experimental Evidence," *American Journal of Political Science* 61, no. 1 (2017): 37-49.
- Carpenter, Daniel. *The Forging of Bureaucratic Autonomy: Reputations, Networks, and Policy Innovation in Executive Agencies, 1863-1928*. Princeton, NJ: Princeton University Press, 2001.
- Chih Lin, A. *Reform in the Making: The Implementation of Social Policy in Prison*. Princeton: Princeton University Press, 2000.
- Citizens Budget Committee. "The Challenge of Making Universal Prekindergarten a Reality in New York State." October 2013.  
[http://www.cbcny.org/sites/default/files/REPORT\\_UPK\\_10222013.pdf](http://www.cbcny.org/sites/default/files/REPORT_UPK_10222013.pdf).
- Cohen, David, and Susan Moffitt. *The Ordeal of Equality: Did Federal Regulation Fix the Schools?*. Cambridge: Harvard University Press, 2009.
- Condon, Patrick, and Ricardo Lopez. "Special Session of Unusual Setting, Suspense Wraps Up." *The Star Tribune*, June 13, 2015,  
<http://www.startribune.com/special-session-features-unusual-setting-suspense-over-environment-budget-final-approval-of-public-schools-funding/307236791/>.

- Constitution of the State of Georgia. Revised January 2005,  
<http://www.senate.ga.gov/Documents/gaconstitution.pdf>.
- Cummings, Jeanne. "Miller Programs Lack Support in House, Survey Finds." *The Atlanta Journal Constitution* (Atlanta, GA), January 13, 1991.
- Curran, F. Chris. "Expanding Downward: Innovation, Diffusion, and State Policy Adoptions of Universal Preschool." *Education Policy Analysis Archive* 23, no. 36 (2015): 1-26.
- Davis, Aaron C. "In Nation's Capital, \$15 Dollar Minimum Wage is Headed Toward 2016 Ballot." *Washington Post* (Washington D.C.), July 22, 2015,  
[https://www.washingtonpost.com/local/dc-politics/in-nations-capital-15-hour-minimum-wage-expected-to-appear-on-2016-ballot/2015/07/22/bdd9f66a-3086-11e5-97ae-30a30cca95d7\\_story.html](https://www.washingtonpost.com/local/dc-politics/in-nations-capital-15-hour-minimum-wage-expected-to-appear-on-2016-ballot/2015/07/22/bdd9f66a-3086-11e5-97ae-30a30cca95d7_story.html).
- Early Childhood Advisory Council to the Massachusetts Board of Education, "Guidelines for Preschool Learning Experiences." Massachusetts Department of Education, April 2003.
- "Education Chief Weighs Longer Year, Merit Pay." *The Berkshire Eagle* (Pittsfield, MA), June 6, 2008.
- Edwards, George C. *Implementing Public Policy*. Washington D.C.: Congressional Quarterly Press, 1980.
- Elmore, Richard. "Backward Mapping: Implementation Research and Policy Decisions." *Political Science Quarterly* 94, no. 4 (1979-1980): 601-616.
- Fellowes, Matthew C., and Gretchen Rowe. "Politics and the New American Welfare States." *American Journal of Political Science* 48, no. 2 (2004): 362-373.
- Freeman, Patricia K. "Interstate Communication among State Legislators regarding Energy Policy Innovation." *Publius*, 15 no. 4 (1985): 99-111.
- Gailmard, Sean, and John W. Patty. *Learning While Governing: Expertise and Accountability in the Executive Branch*. Chicago: Chicago University Press, 2013.
- Garfield, Rachel, Anthony Damico, Cynthia Cox, Gary Claxton, and Larry Levitt. "Estimates of Eligibility for ACA Coverage among the Uninsured in 2016," The Henry J. Kaiser Family Foundation, October 18, 2016, <http://kff.org/health-reform/issue-brief/new-estimates-of-eligibility-for-aca-coverage-among-the-uninsured/>.
- "Georgia Lottery Began," Today in Georgia History,  
<http://www.todayingeorgiahistory.org/content/georgia-lottery-began>.
- Gerber, Brian J., Cherie Maestas, and Nelson C. Dometrius. "State Legislative Influence over

- Agency Rulemaking: The Utility of Ex Ante Review.” *State Politics and Policy Quarterly* 5, no. 1 (2005): 24-46.
- Gerber, Elisabeth R., Arthur Lupia, and Mathew D. McCubbins, “When Does Government Limit the Impact of Voter Initiatives? The Politics of Implementation and Enforcement.” *The Journal of Politics* 66, no. 1 (2004): 43-68.
- Gilardi, Dabrizio, Katharina Fuglister, and Stephane Luyet. “Learning from Others: The Diffusion of Hospital Financing Reforms in OECD Countries.” *Comparative Political Studies* 42, no. 4 (2009): 549-573.
- Glick, Henry R., and Scott P. Hays. “Innovation and Reinvention in State Policymaking: Theory and the Evolution of Living Will Laws.” *The Journal of Politics* 53, no. 3 (1991): 835-850.
- Goggin, M.L., A. Bowman, J.P. Lester, and L.J. O’Toole Jr. *Implementation Theory and Practice: Toward a Third Generation*. Glenview: Scott, Foresman/Little, Brown Higher Education, 1990.
- Gonzales, Jason. “Tennessee Legislature Approves Bill to Improve Pre-k.” *The Tennessean*, March 22, 2016, <http://www.tennessean.com/story/news/education/2016/03/22/tennessee-legislature-approves-bill-improve-pre-k/82112794/>.
- “Good Start, Grow Smart: The Bush Administration’s Early Childhood Initiative.” The White House, <https://georgewbush-whitehouse.archives.gov/infocus/earlychildhood/earlychildhood.html>, accessed January 26, 2017.
- Goonan, Peter. “Funding for Early Childhood Education in Massachusetts to Increase by \$5 Million.” *The Republican*, June 18, 2008.
- Graham, Erin R., Charles R. Shipan, and Craig Volden. “The Diffusion of Policy Diffusion Research in Political Science.” *British Journal of Political Science* 43, no. 3 (2013): 673-701.
- Gray, Virginia. “Innovation in the States: A Diffusion Study.” *The American Political Science Review* 67, no. 4 (1973): 1174-1185.
- Grossback, Lawrence J., Sean Nicholson-Crotty, and David A.M. Peterson. “Ideology and Learning in Policy Diffusion.” *American Politics Research* 32, no. 5 (2004): 521-545.
- Haider-Merkel, Donald P. “Regulating Hate: State and Local Influences on Hate Crime Law Enforcement.” *State Politics and Policy Quarterly* 2 (2002) 126-160.

- Hale, Kathleen. *How Information Matters: Networks and Public Policy Innovation*. Washington D.C.: Georgetown University Press, 2011.
- Hatch, Megan E., and Elizabeth Rigby. "Laboratories of (In)equality? Redistributive Policy and Income Inequality in the American States." *Policy Studies Journal* 43, no. 2 (2015): 163-187.
- Hero, Rodney E., and Robert R. Preuhs. "Immigration and the Evolving American Welfare State: Examining Policies in the U.S. States." *American Journal of Political Science* 51, no. 3 (2007): 498-517.
- "History of Funding Equity," New Jersey Department of Education, <http://www.state.nj.us/education/archive/abbotts/chrono/>, accessed January 30, 2017.
- Honadale, Beth Walter. "A Capacity-Building Framework: A Search for Concept and Purpose." *Public Administration Review* 41, no. 5 (1981): 575-580.
- Hoyt, William H. "An Evaluation of the Kentucky Education Reform Act." Center for Business and Economic Research at the University of Kentucky, [http://cber.uky.edu/Downloads/kentucky\\_education\\_reform\\_act.htm](http://cber.uky.edu/Downloads/kentucky_education_reform_act.htm)
- Hu, Winnie. "A Promise of Pre-k for All is Still Far Off in New York." *The New York Times* (New York, NY), August 22, 2008, [http://www.nytimes.com/2008/08/23/education/23prek.html?\\_r=0](http://www.nytimes.com/2008/08/23/education/23prek.html?_r=0).
- Humphrey, Tom. "Ragsdale Agrees with Bredesen on Major State Funding." *Knoxville News Sentinel* (Knoxville, TN), January 10, 2008.
- Hyatt, Richard. *Zell: The Governor Who Gave GA Hope*. Macon: Mercer University Press, 1991.
- Jones, Jeffrey M. "In U.S. 70% Favor Federal Funds to Expand Pre-k Education." *Gallup.com*, September 8, 2016, <http://www.gallup.com/poll/175646/favor-federal-funds-expand-pre-education.aspx>.
- Jones, Whitney. "Tenn. Democrats Want Pre-K Expansion." *WKMS Murray State's NPR Station*, November 7, 2012, <http://wkms.org/post/tenn-democrats-want-pre-k-expansion#stream/0>.
- Karch, Andrew. *Democratic Laboratories: Policy Diffusion Among the American States*. Ann Arbor: Michigan University Press, 2007.
- Karch, Andrew. *Early Start: Preschool Politics in the United States*. Ann Arbor: University of Michigan Press, 2013.
- Karch, Andrew, and Matthew Craven. "Rapid Diffusion and Policy Reform: The Adoption and

- Modification of Three Strikes Law.” *State Politics and Policy Quarterly* 14, no. 4 (2014): 461-491.
- Karch, Andrew, Sean C. Nicholson-Crotty, Neal D. Woodsand, and Ann O’M Bowman. “Policy Diffusion and the Pro-Innovation Bias,” *Political Research Quarterly*, 69 no. 1 (2016): 83-95.
- Keiser, Lael R and Joe Soss. “With Good Cause: Bureaucratic Discretion and the Politics of Child Support Enforcement.” *American Journal of Political Science* 42, no. 4 (1998): 1133-1156.
- Keiser, Lael R. “State Bureaucratic Discretion and the Administration of Social Welfare Programs: The Case of Social Security Disability.” *Journal of Public Administration Research and Theory: J-Part* 9, no. 1 (1999): 87-107.
- Keiser, Lael R., Peter R. Muesser, and Seung-Whan Choi. “Race, Bureaucratic Discretion and the Implementation of Welfare Reform.” *American Journal of Political Science* 48, no. 2 (2004) 314-327.
- Keiser, Lael and Susan Miller. “The Impact of Organized Interests on Eligibility Determination: The Case of Veterans’ Disability Compensation.” *Journal of Public Administration and Theory* 20, no. 2 (2010): 505-531.
- Kelleher, Christine A. and Susan W. Yackee. “A Political Consequence of Contracting: Organized Interests and State Agency Decision Making.” *JPART* 19, (2008): 579-602.
- Kim, Byungkyu, and Richard Fording. “Second-Order Devolution and the Implementation of TANF in the U.S. States.” *State Politics and Policy Quarterly* 10, no. 4 (2010): 341-367.
- Lax, Jeffry, and Justin Phillips. “Gay Rights in the States: Public Opinion and Policy Responsiveness.” *The American Political Science Review* 103, no. 3 (2009): 367-386.
- Lax, Jeffrey R., and Justin H. Phillips. “The Democratic Deficit in the States.” *American Journal of Political Science* 56, no. 1 (2012): 148-166.
- Lester, James P., and Malcolm M. Goggin. “Back to the Future: The Rediscovery of Implementation Studies.” *Policy Currents* 8, no. 3 (1998): 1-10.
- Lipsey, Mark W., Dale C. Farran, and Kerry G. Hofer. “A Randomized Control Trial of a Statewide Voluntary Prekindergarten Program on Children’s Skills and Behaviors Through the Third Grade.” Peabody Research Institute, September 2015, [https://my.vanderbilt.edu/tnpreevaluation/files/2013/10/VPKthrough3rd\\_final\\_withcover.pdf](https://my.vanderbilt.edu/tnpreevaluation/files/2013/10/VPKthrough3rd_final_withcover.pdf), accessed January 31, 2017.
- Lipsky, Michael. *Street-Level Bureaucracy: Dilemmas of the Individual in Public Services*. New York: Russell Sage Foundation, 1980.

- Lipsky, Michael. "Street-Level Bureaucracy and the Analysis of Urban Reform." *Urban Affairs Quarterly* 6, no. 4 (1971): 391-409.
- Locker, Richard. "Haslam, GOP Senators Differ on Future of Pre-K Program," *Knoxville News Sentinel* (Knoxville, TN), October 27, 2015, <http://www.knoxnews.com/news/politics/haslam-gop-senators-differ-on-future-of-pre-k-program-ep-1340821345-353331811.html>.
- Manna, Paul. *School's In: Federalism and the National Education Agenda*. Washington D.C.: Georgetown University Press, 2006.
- Manna, Paul, and Timothy Harwood. "Governance and Educational Expectations in the U.S. States." *State Politics and Policy Quarterly* 11, no. 4 (2011): 483-509.
- Massachusetts Chapter 205, 2004 Session Laws, <https://malegislature.gov/Laws/SessionLaws/Acts/2004/Chapter205>
- Matland, Richard E. "Synthesizing the Implementation Literature: The Ambiguity- Conflict Model of Policy Implementation." *Journal of Public Administration Research and Theory: J-PART* 5, no. 2 (1995): 145-174.
- May, Peter. "Policy Design and Implementation." In the *Handbook of Public Administration*, edited by B. Guy Peters and John Pierre, 223-233. London: Sage Publications, 2003.
- McCall, Carl. State Comptroller. "The 1997-98 Budget: Fiscal Review and Analysis." New York State, September 1997, <http://www.osc.state.ny.us/reports/budget/1997/9-97.htm#education>.
- McCann, Pamela Clouser, Charles Shipan, and Craig Volden. "Top-Down Federalism: State Policy Responses to National Government Discussions." *Publius* 45 (2015): 495-525
- McCann, Pamela J. Clouser. "Agency Discretion and Public Health and Service Delivery." *HSR: Health Services Research* 44 (2009): 1897- 1908
- McCubbins, Mathew D., Roger G. Noll, and Barry R. Weingast. "Administrative Procedures as Instruments of Political Control." *Journal of Law, Economics, & Organization* 3, no. 2 (1987): 243-277
- Mead, Lawrence M. *Government Matters: Welfare Reform in Wisconsin*. Princeton: Princeton University Press, 2004.
- Meier, Kenneth J., and Lawrence J. O' Toole Jr. *Bureaucracy in a Democratic State: A Governance Perspective*. Baltimore, MD: The Johns Hopkins University Press, 2006.

- Meier, Kenneth J., Joseph Stewart Jr., and Robert E. England. "The Politics of Discretion: Education Access as an Urban Service." *American Journal of Political Science* 35, no. 1 (1991) 155-177.
- Mellon, Ericka. "Knox Gets \$129, 874 for Pre-K Expansion- School District Hopes to Launch 3 New Classes to Join 10 Already Started." *Knoxville News Sentinel* (Knoxville, TN), July 14, 2006.
- Mettler, Suzanne. *Soldiers to Citizens: The G.I. Bill and the Making of the Greatest Generation*. New York: Oxford University Press, 2005.
- Miller, Dawn. "House Bill Allows Public Preschool Counties Would Have to Get Permission to Add Students." *The Charlestown Gazette* (Charlestown, WV), January 25, 2003.
- Miller, Dawn. "Learning to Share the PIECES Education, child-care Pros Work Together on Universal Preschool." *The Charlestown Gazette* (Charlestown, WV), January 19, 2003.
- Miller, Zell. "State of the State." The Georgia General Assembly, Atlanta, 1998.  
<https://www.youtube.com/watch?v=v4x127meHmc>
- Mintrom, Michael. "Policy Entrepreneurs and the Diffusion of Innovation." *American Journal of Political Science* 41, no. 3 (1997): 738-770.
- Mintrom, Michael, and Sandra Vergari. "Policy Networks and Innovation Diffusion: The Case of State Education Reforms." *The Journal of Politics* 60, no. 1 (1998): 126-148.
- Mitchell, Anne. "The State with Two Prekindergarten Programs: A Look at Prekindergarten Education in New York State (1928-2003)." Early Childhood Policy Research, June 2004, <http://nieer.org/resources/files/NYCaseStudy.pdf>.
- Moffitt, Susan. *Making Policy Public: Participatory Bureaucracy in American Democracy*. Cambridge: Cambridge University Press, 2014.
- Mohr, Lawrence B. "Determinants of Innovation in Organizations." *The American Political Science Review* 63, no. 1 (1969): 111-126.
- Mooney, Christopher, and Mei-Hsien Lee. "Legislative Morality in the American States: The Case of Pre-Abortion Regulation Reform." *American Journal of Political Science* 39, no. 1 (2005): 599-627.
- Mossberger, Karen, and Kathleen Hale. "'Polydiffusion' in Intergovernmental Programs: Information Diffusion in School-to-Work Network." *American Review of Public Administration* 32, no. 4 (2002): 398-422.

“New Jersey State Department of Education Preschool Teaching and Learning Standards,” New Jersey Department of Education, 2014.

New York State Ice Co. v. Liebmann 285 U.S. 262 (1932).  
<https://supreme.justia.com/cases/federal/us/285/262/case.html>

“New York Takes a Fresh Look at Universal Pre-k,” National Institute for Early Education Research, <http://nieer-www1.rutgers.edu/publications/new-york-takes-fresh-look-universal-pre-k>, accessed February 5, 2017.

Nicholson-Crotty, Sean C., and Sanya Carley. “Effectiveness, Implementation, and Policy Diffusion.” *State Politics & Policy Quarterly* 16, no. 1 (2016): 78-97.

Norton, Michael. “Poll-More than Two-Thirds Want Expanded Early Education Access.” *The Berkshire Eagle*, May 12, 2005.

Obama, Barack. “The State of the Union.” February 12, 2014.  
<http://www.politico.com/story/2013/02/state-of-the-union-2013-president-barack-obamas-speech-transcript-text-087550?o=4>

O’Brien, Brendan. “California Moves To Extend Health Insurance to Undocumented Immigrants.” *The Huffington Post* (New York: NY), June 11, 2016.

O’Brien, Eileen, and Chuck Dervarics. “Pre-kindergarten: What the Research Shows.” Center for Public Education, March 2007, <http://www.centerforpubliceducation.org/Main-Menu/Pre-kindergarten/Pre-Kindergarten/Pre-kindergarten-What-the-research-shows.html>, accessed February 2, 2017.

O’Toole, Lawrence J. “Research on Policy Implementation: Assessment and Prospects.” *Journal of Public Administration Research and Theory: J-PART* 10, no. 2 (2000): 263-288.

Pacheco, Julianna. “The Social Contagion Model: Exploring the role of Public Opinion on the Diffusion of Antismoking Legislation Across America.” *The Journal of Politics* 74, no. 1 (2012): 187-202.

Patashnik, Eric. *Reforms at Risk: What Happens After Major Policy Changes are Enacted*. Princeton: Princeton University Press, 2008.

Pierson, Paul. “When Effect Becomes Cause: Policy Feedback and Political Change.” *World Politics* 45, no. 4 (1993): 595-628

Potter, Rachel Augustine. “Slow-Rolling, Fast-Tracking, and the Pace of Bureaucratic Decisions in Rulemaking.” Forthcoming in the *Journal of Politics* (2017).

Potter, Rachel Augustine. “Disabling the Alarm? The Politics of Participation in Rulemaking.” Working paper.

- Pratt, Julie. "Derailing Educare Funding for Early Education Programs Should be Restored." *The Charleston Gazette* (Charleston, WV), April 19, 2002.
- Pressman, Jeffry L., and Aaron Wildavsky. *Implementation: How Great Expectations in Washington Are Dashed in Oakland; Or, Why It's Amazing that Federal Programs Work at All. This Being a Saga of the Economic Development Administration as Told by Two Sympathetic Observers Who Seek to Build Morals on a Foundation of Ruined Hopes*. Berkeley and Los Angeles: University of California Press, 1984.
- Raden, Anthony. "Universal Prekindergarten in Georgia: A Case Study of Georgia's Lottery Funded Pre-k Program." Foundation for Child Development, May 1999, <http://fcd-us.org/sites/default/files/Universal%20PreK%20in%20Georgia.pdf>, accessed February 29, 2016
- Reis, Jacqueline. "Statewide Pre-k Takes First Steps in Pilot Program." *Worcester Telegram and Gazette* (Worcester, MA), July 29, 2006.
- Rigby, Elizabeth, and Gerald C. Wright. "Political Parties and Representation of the Poor in the American States." *American Journal of Political Science* 57, no. 3 (2013): 552-565.
- Rourke, Francis E. *Bureaucracy, Politics, and Public Policy*. Brown Little, 1984.
- Rogers, Everett. *The Diffusion of Innovations*. New York: The Free Press, 1983.
- Sabatier, Paul, and Daniel Mazmanian. "The Implementation of Public Policy: A Framework Analysis." *Policy Studies Journal* 4, no. 1 (1980): 538-560.
- Sabatier, Paul A., and Daniel A. Mazmanian. "The Implementation of Public Policy: A Framework for Analysis." In *Effective Policy Implementation*, edited by Daniel A. Mazmanian and Paul A. Sabatier, 3-37. D.C. Heath and Company, 1981.
- Salsberg, Bob. "Officials Laud Preschool, but Urge Caution to Any Expansion." *Associated Press State Wire*, September 16, 2015.
- Sances, Michael W. "The Distributional Impact of Greater Responsiveness: Evidence From New York Towns." *Journal of Politics* 78, no.1 (2016): 105-119.
- Schneider, Anne Larason, and Helen Ingram. "Social Construction of Target Populations: Implications for Politics and Policy." *American Political Science Review* 87, no .2 (1993): 334-347.
- Schulman, Karen. "Overlooked Benefits of Prekindergarten." National Institute for Early Education, March 2005, <http://nieer-www1.rutgers.edu/resources/policyreports/report6.pdf>, accessed February 3, 2017.

- Shipan, Charles R., and Craig Volden. "Bottom-Up Federalism: The Diffusion of Antismoking Policies from U.S. Cities to States." *American Journal of Political Science* 50, no. 4 (2006): 825-843.
- Shipan, Charles R., and Craig Volden. "The Mechanisms of Policy Diffusion." *American Journal of Political Science* 52, no. 4 (2008): 840-857.
- Shipan, Charles R., and Craig Volden. "Policy Diffusion: Seven Lessons for Scholars and Practitioners." *Public Administration Review*, 72, no. 4 (2012): 788-796.
- Shipan, Charles R., and Craig Volden. "When the Smoke Clears: Expertise, Learning and Policy Diffusion." *Journal of Public Policy* 34, no. 3 (2014): 357-287.
- Sisk, Chas. "3 of 5 Tennesseans Want More Spent on Pre-k," *Knoxville News Sentinel* (Knoxville, TN), November 17, 2011.
- Smith, Carrie. "Schools can Improve Study Says: Report Shows State Lacks Cohesion in Early Education." *The Charleston Daily Mail*, January 7, 2002.
- Soss, Joe. "Lessons of Welfare: Policy Design, Political Learning, and Political Action." *The American Political Science Review* 93, no. 2 (1999): 363-380.
- Staff. "How They Voted-Massachusetts Legislature." *The Republican*, March 19, 2006.
- Tatter, Grace. "Once Seeking to Scrap Pre-K, Tennessee's Biggest Pre-K Critic Votes to Improve It." *ChalkBeat*, February 24, 2016.
- Tennessee House Bill No. 2333 Chapter No. 312,  
<http://tennessee.gov/sos/acts/104/pub/pc0312.pdf>.
- Teodoro, Manuel P. "Bureaucratic Job Mobility and the Diffusion of Innovations." *American Journal of Political Science* 53, no. 1 (2009): 175-189.
- Thompson, Frank J. and Michael J. Scicchitano. "State Implementation Effort and Federal Regulatory Policy: The Case of Occupational Safety and Health." *The Journal of Politics* 47, no. 2 (1985): 686-707.
- Vinovski, Maris A. "The Road to Charlottesville: The 1989 Education Summit." National Education Goals Panel, September 1999,  
<http://govinfo.library.unt.edu/negp/reports/negp30.pdf>, accessed February 20, 2015.
- Volden, Craig. "States as Policy Laboratories: Emulating Success in the Children's Health Insurance Program." *American Journal of Political Science* 50, no. 2 (2006): 294-312.
- Volden, Craig. "Delegating Power to Bureaucrats: Evidence from the States." *Journal of Law, Economics & Organization* 18, no. 1 (2002): 187-220.

“Voluntary Pre-K in Tennessee: Understanding the Collaboration Model.” Tennessee Alliance for Early Education, March 2008.

Walker, Jack. “The Diffusion of Innovations among the American States.” *American Political Science Review* 63, no. 3 (1969): 880-899.

Walston, Charles. “Miller: Preschool needs lottery Gambling foes say Florida failing in education funding.” *The Atlanta Journal Constitution* (Atlanta, GA), September 9, 1992.

Walston, Charles. “Miller Would Let Legislature Control Lottery Money After All.” *The Atlanta Journal Constitution* (Atlanta, GA), January 11, 1991.

Walston, Charles. “Miller Bill to Set Up Lottery Introduced but Note Complete.” *The Atlanta Journal Constitution* (Atlanta, GA), February 6, 1992.

Walston, Charles. “Voters to Decide Lottery in 1992; Senate Approves Measure 47-9.” *The Atlanta Journal Constitution* (Atlanta, GA), February 9, 1991.

West Virginia Department of Early Learning. “Overview of West Virginia’s Pre-k: WVBE Policy 2525 West Virginia’s Universal Access to a Quality Early Education System.” West Virginia Early Care and Education, 2014-2015, <https://wvde.state.wv.us/oel/docs/wv-prek-overview.pdf>.

White, Ariel R., Noah L. Nathan, and Julie K. Faller. “What Do I Need to Vote? Bureaucratic Decision and Discrimination by Local Election Officials.” *American Political Science Review* 109, no. 1 (2015): 129-142.

Wilson, Justin P. Tennessee Comptroller of the Treasury. “Tennessee’s Pre-Kindergarten Program.” Office of Research and Education Accountability, October 2009.

Wisconsin Council of Children and Families, “The Unique History of Four-Year-Old Kindergarten in Wisconsin, September 2010, [http://www.wccf.org/assets/great\\_start\\_6\\_history\\_4K.pdf](http://www.wccf.org/assets/great_start_6_history_4K.pdf).

Williams, Bruce A. and Albert R. Matheny. “Testing Theories of Social Regulation: Hazardous Waste Regulation in the American States.” *The Journal of Politics* 46, no. 2 (1984): 428-458.

Wilson, James Q. *Bureaucracy: What Government Agencies Do and Why They Do It*. Basic Books, 1989.

“Where Candidates for Governor Stand on Education.” *Associated Press State Wire*, September 3, 2014.

## **Data Citations**

### State Laws/Statutes

Florida Constitution. art. IX, § 1.

Georgia Constitution. art. I, §II, par. VIII.

Grants for Preschool Educational Programs, Chapter 105 Illinois Compiled Statutes 5, Article 2 § 2-3.71.

Statewide Preschool Program for Four-year-Old-Children, Iowa Code Chapter 256c.1 Iowa, Chapter 256c. (2007).

Massachusetts Universal Pre-k Program, Massachusetts General Laws, Part I, Title II, Chapter 15D, § 13.

New York State Code, §151-1.1-151.1.3.

Early Childhood Education Programs- Standards, Oklahoma State Code §70-11-103.7.

An Act Relating to Providing Access to Publicly Funded Prekindergarten Education (H. 270), Sec. 1. 16 V.S.A § 829.

WBVE Policy 2525, West Virginia's Universal Access to a Quality Early Education (5252), West Virginia Code § 126-28-1-126-28-22.

*Variables: State and Universal Pre-kindergarten Adoption and Percent of Four-Year-Olds Enrolled*

### National Institute for Early Education Research Yearbooks

Barnett, W. Steven, Kenneth B. Robin, Jason T. Hustedt, and Karen Schulman. *The State of Preschool: 2003 State Preschool Yearbook*. New Brunswick: National Institute for Early Education Research, 2003.

Barnett, W. Steven, Jason T. Hustedt, Kenneth B. Robin, and Karen Schulman. *The State of Preschool: 2004 State Preschool Yearbook*. New Brunswick: National Institute for Early Education Research, 2004.

Barnett, W. Steven, Jason T. Hustedt, Kenneth B. Robin, and Karen Schulman. *The State of Preschool: 2005 State Preschool Yearbook*. New Brunswick: National Institute for Early Education Research, 2005.

Barnett, W. Steven, Jason T. Hustedt, Laura E. Hawkinson, and Kenneth B. Robin. *The State of Preschool 2006: State Preschool Yearbook*. New Brunswick: National Institute for Early Education Research, 2006.

Barnett, W. Steven, Jason T. Hustedt, Allison H. Friedman, Judi Stevenson Boyd, and Pat

- Ainsworth. *The State of Preschool 2007: State Preschool Yearbook*. New Brunswick: National Institute for Early Education Research, 2007.
- Barnett, W. Steven, Dale J. Epstein, Allison H. Friedman, Judi Stevenson Boyd, and Jason T. Hustedt. *The State of Preschool 2008: State Preschool Yearbook*. New Brunswick: National Institute for Early Education Research, 2008.
- Barnett, W. Steven, Dale J. Epstein, Allison H. Friedman, Rachel A. Sansanelli, and Jason T. Hustedt. *The State of Preschool 2009: State Preschool Yearbook*. New Brunswick: National Institute for Early Education Research, 2009.
- Barnett, W. Steven, Dale J. Epstein, Megan E. Carolan, Jen Fitzgerald, Debra J. Ackerman, and Allison H. Friedman. *The State of Preschool 2010: State Preschool Yearbook*. New Brunswick: National Institute for Early Education Research, 2010.
- Barnett, W. Steven, Megan E. Carolan, Jen Fitzgerald, and James H. Squires. *The State of Preschool 2011: State Preschool Yearbook*. New Brunswick: National Institute for Early Education Research, 2011.
- Barnett, W. Steven, Megan E. Carolan, Jen Fitzgerald, and James H. Squires. *The State of Preschool 2012: State Preschool Yearbook*. New Brunswick: National Institute for Early Education Research, 2012.
- Barnett, W. Steven, Megan E. Carolan, James H. Squires, and Kristy Clarke Brown. *The State of Preschool 2013: State Preschool Yearbook*. New Brunswick: National Institute for Early Education Research, 2013.
- Barnett, W. Steven, Megan E. Carolan, James H. Squires, and Kristy Clarke Brown. *The State of Preschool 2014: State Preschool Yearbook*. New Brunswick: National Institute for Early Education Research, 2015.
- Barnett, W. Steven, A.H. Friedman-Krauss, R.E. Gomez, M. Horowitz, G.G. Weisenfeld, and J.H. Squires. *The State of Preschool 2015: State Preschool Yearbook*. New Brunswick, NJ: National Institute for Early Education Research, 2016.

#### *Variables: Standards and Bureaucratic Expertise*

##### Standards

- Alabama Department of Children's Affairs. *Alabama Developmental Standards for Preschool Children*. Montgomery, AL: Alabama Department of Children's Affairs, January 2012.
- Department of Education and Early Learning Development and Department of Health and Human Services. *State of Alaska Early Learning Guidelines: A Resource for Parents and Early Educators*. Alaska: Department of Education and Early Learning Development and Department of Health and Human Services, 2007.

Arizona Department of Education. *Arizona Early Learning Standards, 3<sup>rd</sup> Edition*. Arizona: Arizona Department of Education, May 2013.

Arkansas Early Childhood Commission. *Arkansas Early Childhood Education Framework Handbook: For Three & Four Year Old Children*. Little Rock, AR: The Arkansas Division of Child Care and Early Childhood Education, 2004.

California Department of Education. *California Preschool Learning Foundations Volume 1*. Sacramento, CA: California Department of Education, 2008.

California Department of Education. *California Preschool Learning Foundations Volume 2*. Sacramento, CA: California Department of Education, 2010.

California Department of Education. *California Preschool Learning Foundations Volume 3*. Sacramento, CA: California Department of Education, 2012.

Colorado Department of Education. *Colorado Early Learning & Development Guidelines*. Colorado: Colorado Department of Education.

Connecticut Early Childhood Education Cabinet and Connecticut Office of Early Childhood. *Connecticut Early Learning and Development Standards: What Children, Birth to Five, Should Know and be Able to Do*. Connecticut: Connecticut Office of Early Childhood, April 2014.

Delaware Department of Education. *Delaware Early Learning Foundations: Preschool*. Dover, Delaware: Delaware Department of Education, September 2010.

Florida Department of Education Office of Early Learning and Florida's Office of Early Learning. *Florida Early Learning and Developmental Standards For Four-Year-Olds*. Tallahassee, Florida: Florida Department of Education Office of Early Learning and Florida's Office of Early Learning, 2011.

Georgia Department of Early Care and Learning. *Georgia Early Learning and Development Standards: Resource Guide for 3- and 4-Year-Olds*. Atlanta, Georgia: Georgia Department of Early Care and Learning.

Hawai'i Executive Office of Early Learning. *Hawai'i Early Learning and Development Standards*. Hawai'i: The Executive Office of Early Learning, April 2014.

Idaho Department of Health and Welfare. *Idaho Early Learning eGuidelines*. Idaho: Idaho Department of Health and Welfare, December 2013.

Illinois State Board of Education. *Illinois Early Learning and Development Standards: For Preschool 3 Years Old to Kindergarten Enrollment Age*. Illinois: Illinois State Board of Education, September 2013.

Indiana Department of Education, Family and Social Services Administration: Office of Early Childhood and Out of School Learning, and the Early Learning Advisory Committee. *Indiana Early Learning Foundations*. Indiana: Indiana Department of Education, 2015.

Early Childhood Iowa. *Iowa Early Learning Standards*. Iowa: Iowa Department of Education, 2012.

Kansas State Department of Education. *Kansas Early Learning Standards: Building the Foundation for Successful Children*. Topeka, Kansas: Kansas State Department of Education.

Kentucky Governor's Office of Early Childhood. *Building a Strong Foundation for Success: Kentucky's Early Learning Standards*. Kentucky: Kentucky Governor's Office of Early Childhood 2013.

Louisiana Department of Education. *Louisiana's Birth to Five Early Learning & Development Standards*. Louisiana: Louisiana Department of Education, 2013.

Maine Department of Education and Maine Department of Health and Human Services. *State of Maine Early Childhood Learning Guidelines*. Augusta, Maine: Maine Department of Education and Maine Department of Health and Human Services, September, 2005.

Maryland State Department of Education Division of Early Childhood Development. *Maryland Early Learning Standards Birth-8 Year*. Maryland: Maryland State Department of Education.

Massachusetts Department of Education. *Guidelines for Preschool Learning Experiences*. Malden, Massachusetts: Massachusetts Department of Education April 2003.

Michigan State Board of Education. *Early Childhood Standards of Quality for Prekindergarten*. Michigan State Board of Education. Lansing, Michigan: Michigan State Board of Education, revised March 2013.

Minnesota Department of Education and Minnesota Department of Human Services. *Early Childhood Indicators of Progress: Minnesota's Early Learning Standards*. Minnesota: Minnesota Department of Education and Minnesota Department of Human Services, 2005.

Mississippi Department of Education. *Mississippi Early Learning Guidelines for Classrooms Serving Four-Year-Olds*. Jackson, Mississippi: Mississippi Department of Education, 2015.

Missouri Department of Elementary and Secondary Education. *Missouri Early Learning Goals: Birth to Kindergarten Entry*. Missouri: Missouri Department of Elementary and Secondary Education.

Montana Office of Public Instruction. *Montana Early Learning Standards*. Montana: Montana Office of Public Instruction, 2014.

Nebraska Department of Education and Nebraska Department of Health and Human Services. *Nebraska Early Learning Guidelines for Ages 3 to 5*. Nebraska: Nebraska Department of Education, 2013.

Nevada Department of Education. *Nevada Pre-kindergarten Standards: Building a Foundation for School Readiness and Success in Pre K-12 and Beyond*. Carson City, Nevada: Nevada Department of Education, 2010.

New Hampshire Department of Health and Human Services and the New Hampshire Department of Education. *NH Early Learning Standards: Birth through 5*. New Hampshire: New Hampshire Department of Health and Human Services and the New Hampshire Department of Education, June 2016.

New Jersey State Department of Education. *2014 Preschool Teaching and Learning Standards*. New Jersey: New Jersey State Department of Education, 2014.

New Mexico State Children, Youth and Families Department and Department of Health, and Public Education Department. *New Mexico Early Learning Guidelines: Birth through Kindergarten*. New Mexico: New Mexico State Children, Youth and Families Department and Department of Health, and Public Education Department, July 2014.

The New York State Education Department. *New York State Prekindergarten Foundation for the Common Core*. Albany, New York: The New York State Education Department.

North Carolina Foundations Task Force. *North Carolina Foundations for Early Learning and Development*. Raleigh, North Carolina: North Carolina Foundations Task Force, 2013.

North Dakota Department of Public Instruction. *North Dakota Pre-kindergarten Content Standards*. Bismarck, North Dakota: North Dakota Department of Public Instruction, September 2013.

Oklahoma Department of Human Services Oklahoma Child Care Services. *Oklahoma Early Learning Guidelines for Children: Ages Three through Five*. Oklahoma City, Oklahoma; Oklahoma Department of Human Services Oklahoma.

Ohio Department of Education and Ohio Department of Job and Family Services. *Ohio's Early Learning and Development Standards in All Essential Domains of School Readiness (Birth-Age 5)*. Ohio: Ohio Department of Education and Ohio Department of Job and Family Services.

Office of Head Start. *The Head Start Child Development and Early Learning Framework: Promoting Positive Outcomes in Early Childhood Programs Serving Children 3-5 Years*

- Old. Arlington, Virginia: U.S. Department of Health and Human Services, Administration for Children and Families, and the Office of Head Start, 2010. (Oregon's Standards)
- Office of Child Development and Early Learning. *Pennsylvania Learning Standards for Early Childhood Pre-Kindergarten*. Pennsylvania: Pennsylvania Department of Human Services, and Pennsylvania Department of Education, 2014.
- Rhode Island Department of Education and the Executive Office of Health and Human Services. *RI Early Learning & Development Standards*. Rhode Island: Rhode Island Department of Education.
- The Good Start, Grow Smart Task Force. *Good Start Grow Smart: South Carolina Early Learning Standards for 3, 4, & 5 Year-Old Children*. South Carolina: South Carolina Department of Education, August 2009.
- The University of South Dakota. *South Dakota Early Learning Guidelines*. South Dakota: Department of Education Head Start-State Collaboration Office.
- Tennessee Department of Education. *Revised Tennessee Early Learning Developmental Standards for Four-Year-Olds*. Tennessee: Tennessee Department of Education, August 2012.
- Utah State Office of Education and Utah Department of Workforce Services. *Utah's Early Childhood Core Standards with Teaching Strategies and Activities*. Salt Lake City, Utah: Utah State Office of Education, 2013.
- Vermont Agency of Education and Vermont Department for Children and Families Child Development Division. *Vermont Early Learning Standards: Birth to Age 3, Preschool, Kindergarten, and Grades 1, 2, and 3*. Vermont: Vermont Agency of Education and Vermont Department for Children and Families Child Development Division, August 2015.
- Office of Humanities and Early Childhood Virginia Department of Education. *Virginia's Foundation Blocks for Early Learning: Comprehensive Standards for Four-Year-Olds*. Richmond, Virginia: Virginia Department of Education 2013.
- Washington State Department of Early Learning. *Washington State Early Learning and Development Guidelines: Birth through 3<sup>rd</sup> Grade*. Washington State Department of Early Learning, Olympia, WA: 2012.
- West Virginia Department of Education. *Early Learning Standards Framework Guidebook, 3<sup>rd</sup> Edition*. West Virginia: West Virginia Board of Education. August 10, 2015.
- Department of Public Instruction Early Childhood Consultant. *Wisconsin Model Early Learning*

*Standards Fourth Edition: Birth to First Grade*. Madison, WI: Wisconsin Department of Public Instruction, 2013.

Wyoming Department of Education. *Early Childhood Readiness Standards*. Cheyenne, WI: Wyoming Department of Education.

*Variables: Election Year, Non-Election Year, Unified Government*

Williams, Joel (ed.). "Governor of Alabama." Ballotpedia.org, accessed July 14, 2015, [https://ballotpedia.org/Governor\\_of\\_Alabama](https://ballotpedia.org/Governor_of_Alabama)

Williams, Joel (ed.). "Governor of Alaska." Ballotpedia.org, accessed July 14, 2015, [https://ballotpedia.org/Governor\\_of\\_Alaska](https://ballotpedia.org/Governor_of_Alaska)

Williams, Joel (ed.). "Governor of Arizona." Ballotpedia.org, accessed July 14, 2015, [https://ballotpedia.org/Governor\\_of\\_Arizona](https://ballotpedia.org/Governor_of_Arizona)

Williams, Joel (ed.). "Governor of Arkansas." Ballotpedia.org, accessed July 14, 2015, [https://ballotpedia.org/Governor\\_of\\_Arkansas](https://ballotpedia.org/Governor_of_Arkansas)

Williams, Joel (ed.). "Governor of California." Ballotpedia.org, accessed July 14, 2015, [https://ballotpedia.org/Governor\\_of\\_California](https://ballotpedia.org/Governor_of_California)

Williams, Joel (ed.). "Governor of Colorado." Ballotpedia.org, accessed July 14, 2015, [https://ballotpedia.org/Governor\\_of\\_Colorado](https://ballotpedia.org/Governor_of_Colorado)

Williams, Joel (ed.). "Governor of Connecticut." Ballotpedia.org, accessed July 14, 2015, [https://ballotpedia.org/Governor\\_of\\_Connecticut](https://ballotpedia.org/Governor_of_Connecticut)

Williams, Joel (ed.). "Governor of Delaware." Ballotpedia.org, accessed July 14, 2015, [https://ballotpedia.org/Governor\\_of\\_Delaware](https://ballotpedia.org/Governor_of_Delaware)

Williams, Joel (ed.). "Governor of Florida." Ballotpedia.org, accessed July 14, 2015, [https://ballotpedia.org/Governor\\_of\\_Florida](https://ballotpedia.org/Governor_of_Florida)

Williams, Joel (ed.). "Governor of Georgia." Ballotpedia.org, accessed July 14, 2015, [https://ballotpedia.org/Governor\\_of\\_Georgia](https://ballotpedia.org/Governor_of_Georgia)

Williams, Joel (ed.). "Governor of Hawaii." Ballotpedia.org, accessed July 14, 2015, [https://ballotpedia.org/Governor\\_of\\_Hawaii](https://ballotpedia.org/Governor_of_Hawaii)

Williams, Joel (ed.). "Governor of Idaho." Ballotpedia.org, accessed July 14, 2015, [https://ballotpedia.org/Governor\\_of\\_Idaho](https://ballotpedia.org/Governor_of_Idaho)

Williams, Joel (ed.). "Governor of Illinois." Ballotpedia.org, accessed July 14, 2015, [https://ballotpedia.org/Governor\\_of\\_Illinois](https://ballotpedia.org/Governor_of_Illinois)

Williams, Joel (ed.). "Governor of Indiana." Ballotpedia.org, accessed July 14, 2015,  
[https://ballotpedia.org/Governor\\_of\\_Indiana](https://ballotpedia.org/Governor_of_Indiana)

Williams, Joel (ed.). "Governor of Iowa." Ballotpedia.org, accessed July 14, 2015,  
[https://ballotpedia.org/Governor\\_of\\_Iowa](https://ballotpedia.org/Governor_of_Iowa)

Williams, Joel (ed.). "Governor of Kansas." Ballotpedia.org, accessed July 14, 2015,  
[https://ballotpedia.org/Governor\\_of\\_Kansas](https://ballotpedia.org/Governor_of_Kansas)

Williams, Joel (ed.). "Governor of Kentucky." Ballotpedia.org, accessed March 8, 2017,  
[https://ballotpedia.org/Governor\\_of\\_Kentucky](https://ballotpedia.org/Governor_of_Kentucky)

Williams, Joel (ed.). "Governor of Louisiana." Ballotpedia.org, accessed July 14, 2015,  
[https://ballotpedia.org/Governor\\_of\\_Louisiana](https://ballotpedia.org/Governor_of_Louisiana)

Williams, Joel (ed.). "Governor of Maine." Ballotpedia.org, accessed July 14, 2015,  
[https://ballotpedia.org/Governor\\_of\\_Maine](https://ballotpedia.org/Governor_of_Maine)

Williams, Joel (ed.). "Governor of Maryland." Ballotpedia.org, accessed July 14, 2015,  
[https://ballotpedia.org/Governor\\_of\\_Maryland](https://ballotpedia.org/Governor_of_Maryland)

Williams, Joel (ed.). "Governor of Massachusetts." Ballotpedia.org, accessed July 14, 2015,  
[https://ballotpedia.org/Governor\\_of\\_Massachusetts](https://ballotpedia.org/Governor_of_Massachusetts)

Williams, Joel (ed.). "Governor of Michigan." Ballotpedia.org, accessed July 14, 2015,  
[https://ballotpedia.org/Governor\\_of\\_Michigan](https://ballotpedia.org/Governor_of_Michigan)

Williams, Joel (ed.). "Governor of Minnesota." Ballotpedia.org, accessed July 14, 2015,  
[https://ballotpedia.org/Governor\\_of\\_Minnesota](https://ballotpedia.org/Governor_of_Minnesota)

Williams, Joel (ed.). "Governor of Mississippi." Ballotpedia.org, accessed July 14, 2015,  
[https://ballotpedia.org/Governor\\_of\\_Mississippi](https://ballotpedia.org/Governor_of_Mississippi)

Williams, Joel (ed.). "Governor of Missouri." Ballotpedia.org, accessed July 14, 2015,  
[https://ballotpedia.org/Governor\\_of\\_Missouri](https://ballotpedia.org/Governor_of_Missouri)

Williams, Joel (ed.). "Governor of Montana." Ballotpedia.org, accessed July 14, 2015,  
[https://ballotpedia.org/Governor\\_of\\_Montana](https://ballotpedia.org/Governor_of_Montana)

Williams, Joel (ed.). "Governor of Nebraska." Ballotpedia.org, accessed July 14, 2015,  
[https://ballotpedia.org/Governor\\_of\\_Nebraska](https://ballotpedia.org/Governor_of_Nebraska)

Williams, Joel (ed.). "Governor of Nevada." Ballotpedia.org, accessed July 14, 2015,  
[https://ballotpedia.org/Governor\\_of\\_Nevada](https://ballotpedia.org/Governor_of_Nevada)

“Governor of New Hampshire.” Ballotpedia.org, accessed July 14, 2015,  
[https://ballotpedia.org/Governor\\_of\\_New\\_Hampshire](https://ballotpedia.org/Governor_of_New_Hampshire)

“Governor of New Jersey.” Ballotpedia.org, accessed July 14, 2015,  
[https://ballotpedia.org/Governor\\_of\\_New\\_Jersey](https://ballotpedia.org/Governor_of_New_Jersey)

Williams, Joel (ed.). “Governor of New Mexico.” Ballotpedia.org, accessed July 14, 2015,  
[https://ballotpedia.org/Governor\\_of\\_New\\_Mexico](https://ballotpedia.org/Governor_of_New_Mexico)

Williams, Joel (ed.). “Governor of New York.” Ballotpedia.org, accessed July 14, 2015,  
[https://ballotpedia.org/Governor\\_of\\_New\\_York](https://ballotpedia.org/Governor_of_New_York)

Williams, Joel (ed.). “Governor of North Carolina.” Ballotpedia.org, accessed July 14, 2015,  
[https://ballotpedia.org/Governor\\_of\\_North\\_Carolina](https://ballotpedia.org/Governor_of_North_Carolina)

Williams, Joel (ed.). “Governor of North Dakota.” Ballotpedia.org, accessed July 14, 2015,  
[https://ballotpedia.org/Governor\\_of\\_North\\_Dakota](https://ballotpedia.org/Governor_of_North_Dakota)

Williams, Joel (ed.). “Governor of Ohio.” Ballotpedia.org, accessed July 14, 2015,  
[https://ballotpedia.org/Governor\\_of\\_Ohio](https://ballotpedia.org/Governor_of_Ohio)

Williams, Joel (ed.). “Governor of Oklahoma.” Ballotpedia.org, accessed July 14, 2015,  
[https://ballotpedia.org/Governor\\_of\\_Oklahoma](https://ballotpedia.org/Governor_of_Oklahoma)

Williams, Joel (ed.). “Governor of Oregon.” Ballotpedia.org, accessed July 14, 2015,  
[https://ballotpedia.org/Governor\\_of\\_Oregon](https://ballotpedia.org/Governor_of_Oregon)

Williams, Joel (ed.). “Governor of Pennsylvania.” Ballotpedia.org, accessed July 14, 2015,  
[https://ballotpedia.org/Governor\\_of\\_Pennsylvania](https://ballotpedia.org/Governor_of_Pennsylvania)

Williams, Joel (ed.). “Governor of Rhode Island.” Ballotpedia.org, accessed July 14, 2015,  
[https://ballotpedia.org/Governor\\_of\\_Rhode\\_Island](https://ballotpedia.org/Governor_of_Rhode_Island)

Williams, Joel (ed.). “Governor of South Carolina.” Ballotpedia.org, accessed July 14, 2015,  
[https://ballotpedia.org/Governor\\_of\\_South\\_Carolina](https://ballotpedia.org/Governor_of_South_Carolina)

Williams, Joel (ed.). “Governor of South Dakota.” Ballotpedia.org, accessed July 14, 2015,  
[https://ballotpedia.org/Governor\\_of\\_South\\_Dakota](https://ballotpedia.org/Governor_of_South_Dakota)

Williams, Joel (ed.). “Governor of Tennessee.” Ballotpedia.org, accessed July 14, 2015,  
[https://ballotpedia.org/Governor\\_of\\_Tennessee](https://ballotpedia.org/Governor_of_Tennessee)

Williams, Joel (ed.). “Governor of Texas.” Ballotpedia.org, accessed July 14, 2015,  
[https://ballotpedia.org/Governor\\_of\\_Texas](https://ballotpedia.org/Governor_of_Texas)

Williams, Joel (ed.). “Governor of Utah.” Ballotpedia.org, accessed July 14, 2015,

[https://ballotpedia.org/Governor\\_of\\_Utah](https://ballotpedia.org/Governor_of_Utah)

Williams, Joel (ed.). "Governor of Vermont." Ballotpedia.org, accessed July 14, 2015, [https://ballotpedia.org/Governor\\_of\\_Vermont](https://ballotpedia.org/Governor_of_Vermont)

Williams, Joel (ed.). "Governor of Virginia." Ballotpedia.org, accessed July 14, 2015, [https://ballotpedia.org/Governor\\_of\\_Virginia](https://ballotpedia.org/Governor_of_Virginia)

Williams, Joel (ed.). "Governor of Washington." Ballotpedia.org, accessed July 14, 2015, [https://ballotpedia.org/Governor\\_of\\_Washington](https://ballotpedia.org/Governor_of_Washington)

Williams, Joel (ed.). "Governor of West Virginia." Ballotpedia.org, accessed July 14, 2015, [https://ballotpedia.org/Governor\\_of\\_West\\_Virginia](https://ballotpedia.org/Governor_of_West_Virginia)

Williams, Joel (ed.). "Governor of Wisconsin." Ballotpedia.org, accessed July 14, 2015, [https://ballotpedia.org/Governor\\_of\\_Wisconsin](https://ballotpedia.org/Governor_of_Wisconsin)

Williams, Joel (ed.). "Governor of Wisconsin." Ballotpedia.org, accessed July 14, 2015, [https://ballotpedia.org/Governor\\_of\\_Wyoming](https://ballotpedia.org/Governor_of_Wyoming)

"2014 State and Legislative Party Composition." National Council of State Legislatures, last updated June 9, 2014, [http://www.ncsl.org/documents/statevote/legiscontrol\\_2014.pdf](http://www.ncsl.org/documents/statevote/legiscontrol_2014.pdf).

"Current Governors." National Governors Association. <https://www.nga.org/cms/governors/bios>

*Variables: Legislative Professionalism*

Squire, Peverill. "Measuring State Legislative Professionalism: The Squire Index Revisited." *State Politics & Policy Quarterly* 7 no. 2 (2007): 211-227.

*Variables: Public Union Membership*

Hirsch, Barry and David Macpherson. Union Membership and Coverage Database from CPS. UnionStats.com

*Variables: Region*

Geography Division. "Census Regions and Divisions of the United States." United States Department of Commerce, Economics, and Statistics Administration and the United States Census Bureau. [http://www2.census.gov/geo/pdfs/maps-data/maps/reference/us\\_regdiv.pdf](http://www2.census.gov/geo/pdfs/maps-data/maps/reference/us_regdiv.pdf)

*Variables: Appointment of the Chief Education Official*

Book of States

*The Book of the States 1994-1995*. The Council of State Governments. <http://knowledgecenter.csg.org/kc/category/content-type/bos-archive>

*The Book of the States 1996-1997.* The Council of State Governments.  
<http://knowledgecenter.csg.org/kc/category/content-type/bos-archive>

*The Book of the States 1998-1999.* The Council of State Governments.  
<http://knowledgecenter.csg.org/kc/category/content-type/bos-archive>

*The Book of the States 2000-2001.* The Council of State Governments.  
<http://knowledgecenter.csg.org/kc/category/content-type/bos-archive>

*The Book of the States 2002.* The Council of State Governments.  
<http://knowledgecenter.csg.org/kc/category/content-type/bos-archive>

*The Book of the States 2003.* The Council of State Governments.  
<http://knowledgecenter.csg.org/kc/category/content-type/bos-archive>

*The Book of the States 2004.* The Council of State Governments.  
<http://knowledgecenter.csg.org/kc/category/content-type/bos-archive>

*The Book of the States 2005.* The Council of State Governments.  
<http://knowledgecenter.csg.org/kc/category/content-type/bos-archive>

*The Book of the States 2006.* The Council of State Governments.  
<http://knowledgecenter.csg.org/kc/category/content-type/bos-archive>

*The Book of the States 2007.* The Council of State Governments.  
<http://knowledgecenter.csg.org/kc/category/content-type/bos-archive>

*The Book of the States 2008.* The Council of State Governments.  
<http://knowledgecenter.csg.org/kc/category/content-type/bos-archive>

*The Book of the States 2009.* The Council of State Governments.  
<http://knowledgecenter.csg.org/kc/category/content-type/bos-archive>

*The Book of the States 2010.* The Council of State Governments.  
<http://knowledgecenter.csg.org/kc/category/content-type/bos-archive>

*The Book of the States 2011.* The Council of State Governments.  
<http://knowledgecenter.csg.org/kc/category/content-type/bos-archive>

*The Book of the States 2012.* The Council of State Governments.  
<http://knowledgecenter.csg.org/kc/category/content-type/bos-archive>

*The Book of the States 2013.* The Council of State Governments.  
<http://knowledgecenter.csg.org/kc/category/content-type/bos-archive>

*The Book of the States 2014.* The Council of State Governments.

<http://knowledgecenter.csg.org/kc/category/content-type/bos-archive>

*Variables: Under 5 Population, Percent of Residents with a Bachelor's Degree, General Revenue, Size of Education Bureaucracy*

Logged Under 5 Population

Population Estimates Program, Population Division. "ST-99-8: Population Estimates for the U.S., Regions, and Divisions, and States by 5-year Age Groups and Sex: Time Series Estimates, July 1, 1990 to July 1, 1999 and April 1, 1990 Census Population Counts." United States Census Bureau. <https://www2.census.gov/programs-surveys/popest/tables/1990-2000/state/asrh/st-99-08.txt>

Population Division. "Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Alabama: April 1, 2000 to July 1, 2010." United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. "Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Alaska: April 1, 2000 to July 1, 2010." United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. "Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Arizona: April 1, 2000 to July 1, 2010." United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. "Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Arkansas: April 1, 2000 to July 1, 2010." United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. "Table 2: Intercensal Estimates of the Resident Population by Sex and Age for California: April 1, 2000 to July 1, 2010." United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. "Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Colorado: April 1, 2000 to July 1, 2010." United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. "Table 2: Intercensal Estimates of the Resident Population by Sex and Age

for Connecticut: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Delaware: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Florida: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Georgia: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Hawaii: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Idaho: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Illinois: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Indiana: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Iowa: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age

for Kansas: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Kentucky: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Louisiana: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Maine: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Maryland: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Massachusetts: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Michigan: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Minnesota: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Mississippi: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age

for Missouri: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Montana: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Nebraska: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Nevada: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for New Hampshire: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for New Jersey: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for New Mexico: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for New York: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for North Carolina: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age

for North Dakota: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Ohio: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Oklahoma: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Oregon: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Pennsylvania: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Rhode Island: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for South Carolina: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for South Dakota: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Tennessee: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age

for Texas: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Utah: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Vermont: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Virginia: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Washington: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for West Virginia: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Wisconsin: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

Population Division. “Table 2: Intercensal Estimates of the Resident Population by Sex and Age for Wyoming: April 1, 2000 to July 1, 2010.” United States Census Bureau, October 2012, accessed July 27, 2015, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

American Fact Finder. “Table 1: Estimates of the Resident Population by Selected Age Groups for the United States, States, and Puerto Rico: July 1, 2011.” United States Census Bureau.

American Fact Finder. “Annual Estimates of the Resident Population for Selected Age Groups

by Sex for the United States, States, Counties, and Puerto Rico Commonwealth and Municipios: April 1, 2010 to July 1, 2013, 2013 Population estimates.” United States Census Bureau. <https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>.

## Educational Attainment

Educational Attainment in the United States: 1994 Tables. “Table 13: Educational Attainment of Persons 25 Years Old and Over, for States: March 1994.” United States Census Bureau, February 1995, accessed July 29, 2015, <https://www.census.gov/data/tables/1994/demo/educational-attainment/cps-detailed-tables.html>

Educational Attainment in the United States: March 1995. “Table 13: Educational Attainment of Persons 25 Years Old and Over, for States: March 1995.” United States Census Bureau, March 1997, accessed July 29, 2015, <https://www.census.gov/data/tables/1995/demo/educational-attainment/p20-489.html>

Educational Attainment in the United States: March 1996 (Update). “Table 13: Educational Attainment of Persons 25 Years Old and Over, for States: March 1996.” United States Census Bureau, accessed July 29, 2015, <https://www.census.gov/data/tables/1996/demo/educational-attainment/p20-493.html>

Educational Attainment in the United States: March 1997. “Table 13: Educational Attainment of Persons 25 Years Old and Over, for States: March 1997.” United States Census Bureau, accessed July 29, 2015, <https://www.census.gov/data/tables/1997/demo/educational-attainment/p20-505.html>

Educational Attainment in the United States: March 1998 (Update). “Table 13: Educational Attainment of Persons 25 Years Old and Over, for States: March 1998.” United States Census Bureau, accessed July 29, 2015, <https://www.census.gov/data/tables/1998/demo/educational-attainment/p20-513.html>

Educational Attainment in the United States: 1999- Detailed Tables. “Table 13: Educational Attainment of the Population 25 Years Old and Over, by State, Including Confidence Intervals of Estimates: March 1999.” United States Census Bureau, September 15, 2000, accessed July 29, 2015, <https://www.census.gov/data/tables/1999/demo/educational-attainment/p20-528.html>

Educational Attainment in the United States: 2000 Educational Attainment in the United States: 2000- Detailed Tables. “Table 13: Educational Attainment of the Population 25 Years Old and Over, by State, Including Confidence Intervals of Estimates: March 2000.” United States Census Bureau, December 19, 2000, accessed July 29, 2015, <https://www.census.gov/data/tables/2000/demo/educational-attainment/p20-536.html>

Educational Attainment in the United States: 2001. “Table 13: Educational Attainment of the

Population 25 Years Old and Over, by State, Including Confidence Intervals of Estimates: March 2001.” United States Census Bureau, March 21, 2003, accessed July 29, 2015, <https://www.census.gov/data/tables/2001/demo/educational-attainment/cps-detailed-tables.html>

Educational Attainment in the United States: 2002. “Table 13: Educational Attainment of the Population 25 Years Old and Over, by State, Including Confidence Intervals of Estimates: March 2002.” United States Census Bureau, March 21, 2003, accessed July 29, 2015, <https://www.census.gov/data/tables/2002/demo/educational-attainment/cps-detailed-tables.html>

Educational Attainment in the United States: 2003. “Table 13: Educational Attainment of the Population 25 Years Old and Over, by State, Including Confidence Intervals of Estimates: 2003.” United States Census Bureau, June 29, 2004, accessed July 29, 2015, <https://www.census.gov/data/tables/2003/demo/educational-attainment/p20-550.html>

Educational Attainment in the United States: 2004. “Table 13: Educational Attainment of the Population 25 Years Old and Over, by State, Including Confidence Intervals of Estimates: 2004.” United States Census Bureau, March 2005, accessed July 29, 2015, <https://www.census.gov/data/tables/2004/demo/educational-attainment/cps-detailed-tables.html>

Educational Attainment in the United States: 2005. “Table 13: Educational Attainment of the Population 25 Years Old and Over, by State, including Margin of Error: 2005.” United States Census Bureau, October 26, 2006, accessed July 29, 2015, <https://www.census.gov/data/tables/2005/demo/educational-attainment/cps-detailed-tables.html>

Educational Attainment in the United States: 2006. “Table 13: Educational Attainment of the Population 25 Years Old and Over, by State, including Margin of Error: 2006.” United States Census Bureau, March 15, 2007, accessed July 29, 2015, <https://www.census.gov/data/tables/2006/demo/educational-attainment/cps-detailed-tables.html>

Educational Attainment in the United States: 2007. “Table 2: Educational Attainment for the Population Aged 25 and Over by Region, State, and Nativity Status: 2007.” United States Census Bureau, January 2009, accessed July 29, 2015, <https://www.census.gov/library/publications/2009/demo/p20-560.html>

2008 American Community Survey 1 Year Estimates. “Table S1501: Educational Attainment.” United States Census Bureau.

Educational Attainment in the United States: 2009. “Table 2: Educational Attainment for the Population Aged 25 and Over by Region, State, and Nativity Status: 2009.” United States Census Bureau, February 2012, accessed July 29, 2015, <https://www.census.gov/library/publications/2012/demo/p20-566.html>

2010 American Community Survey 1 Year Estimates. "Table S. 1501: Education Attainment for States, Percent with High School Diploma and with Bachelor's Degree: 2010." United States Census Bureau.

2011 American Community Survey 1 Year Estimates. "Table S. 1501: Educational Attainment." United States Census Bureau.

2012 American Community Survey 1 Year Estimates. "Table S. 1501: Educational Attainment." United States Census Bureau.

2012 American Community Survey 1 Year Estimates. "Table DP02: Selected Social Characteristics in the United States." United States Census Bureau.

#### General Revenue

1994 Annual Survey of State Government Finances. "State Government Finances" United States Census Bureau, accessed August 26, 2015,  
[https://www.census.gov/govs/state/historical\\_data\\_1994.html](https://www.census.gov/govs/state/historical_data_1994.html)

1995 Annual Survey of State Government Finances. "State Government Finances." United States Census Bureau, accessed August 26, 2015,  
[https://www.census.gov/govs/state/historical\\_data\\_1995.html](https://www.census.gov/govs/state/historical_data_1995.html)

1996 Annual Survey of State Government Finances. "State Government Finances: 1996." United States Census Bureau, accessed August 26, 2015,  
[https://www.census.gov/govs/state/historical\\_data\\_1996.html](https://www.census.gov/govs/state/historical_data_1996.html)

1997 Annual Survey of State Government Finances. "State Government Finances: 1997." United States Census Bureau, accessed August 26, 2015,  
[https://www.census.gov/govs/state/historical\\_data\\_1997.html](https://www.census.gov/govs/state/historical_data_1997.html)

1998 Annual Survey of State Government Finances. "State Government Finances: 1998." United States Census Bureau, accessed August 26, 2015,  
[https://www.census.gov/govs/state/historical\\_data\\_1998.html](https://www.census.gov/govs/state/historical_data_1998.html)

1999 Annual Survey of State Government Finances. "State Government Finances: 1999." United States Census Bureau, accessed August 26, 2015,  
[https://www.census.gov/govs/state/historical\\_data\\_1999.html](https://www.census.gov/govs/state/historical_data_1999.html)

2000 Annual Survey of State Government Finances. "State Government Finances: 2000." United States Census Bureau, Revised September 2002, accessed August 26, 2015,  
[https://www.census.gov/govs/state/historical\\_data\\_2000.html](https://www.census.gov/govs/state/historical_data_2000.html)

2001 Annual Survey of State Government Finances. "State Government Finances: 2001." United

- States Census Bureau, Revised March 2004, accessed August 26, 2015,  
[https://www.census.gov/govs/state/historical\\_data\\_2001.html](https://www.census.gov/govs/state/historical_data_2001.html)
- 2002 Annual Survey of State Government Finances. “State Government Finances: 2002.” United States Census Bureau, Revised November 2005, accessed August 26, 2015,  
[https://www.census.gov/govs/state/historical\\_data\\_2001.html](https://www.census.gov/govs/state/historical_data_2001.html)
- 2003 Annual Survey of State Government Finances. “State Government Finances: 2003.” United States Census Bureau, February 2005, accessed August 26, 2015,  
[https://www.census.gov/govs/state/historical\\_data\\_2003.html](https://www.census.gov/govs/state/historical_data_2003.html)
- 2004 Annual Survey of State Government Finances. “State Government Finances: 2004.” United States Census Bureau, Revised December 15, 2010, accessed August 26, 2015,  
[https://www.census.gov/govs/state/historical\\_data\\_2004.html](https://www.census.gov/govs/state/historical_data_2004.html)
- 2005 Annual Survey of State Government Finances. “State Government Finances: 2005.” United States Census Bureau, Revised December 20, 2010, accessed August 26, 2015,  
[https://www.census.gov/govs/state/historical\\_data\\_2005.html](https://www.census.gov/govs/state/historical_data_2005.html)
- 2006 Annual Survey of State Government Finances. “State Government Finances: 2006.” United States Census Bureau, Revised December 15, 2010, accessed August 26, 2015,  
[https://www.census.gov/govs/state/historical\\_data\\_2005.html](https://www.census.gov/govs/state/historical_data_2005.html)
- 2007 Annual Survey of State Government Finances. “State Government Finances: 2007.” United States Census Bureau, Revised January 23, 2014, accessed August 26, 2015,  
[https://www.census.gov/govs/state/historical\\_data\\_2007.html](https://www.census.gov/govs/state/historical_data_2007.html)
- 2008 Annual Survey of State Government Finances. “State Government Finances: 2008.” United States Census Bureau, Revised January 23, 2014, accessed August 26, 2015,  
[https://www.census.gov/govs/state/historical\\_data\\_2008.html](https://www.census.gov/govs/state/historical_data_2008.html)
- 2009 Annual Survey of State Government Finances. “State Government Finances: 2009.” United States Census Bureau, Revised January 23, 2014, accessed August 26, 2015,  
[https://www.census.gov/govs/state/historical\\_data\\_2009.html](https://www.census.gov/govs/state/historical_data_2009.html)
- 2010 Annual Survey of State Government Finances. “State Government Finances: 2010.” United States Census Bureau, Revised January 23, 2014, accessed August 26, 2015,  
[https://www.census.gov/govs/state/historical\\_data\\_2010.html](https://www.census.gov/govs/state/historical_data_2010.html)
- 2011 Annual Survey of State Government Finances. “State Government Finances: 2011.” United States Census Bureau, Revised January 23, 2014, accessed August 26, 2015,  
[https://www.census.gov/govs/state/historical\\_data\\_2011.html](https://www.census.gov/govs/state/historical_data_2011.html)
- 2012 Annual Survey of State Government. “SGF001: State Government Finances: 2012.” United States Census Bureau, accessed August 28, 2015,  
<https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>

2013 Annual Survey of State Government. “SGF003: State Government Finances: 2012.” United States Census Bureau, accessed August 28, 2015,  
<https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>

## Size of the Education Bureaucracy

Government Employment and Payroll. “1994 Public Employment Data.” United States Census Bureau, accessed April 7, 2016,  
[https://www.census.gov/govs/apes/historical\\_data\\_1994.html](https://www.census.gov/govs/apes/historical_data_1994.html)

Government Employment and Payroll. “1995 Public Employment Data.” United States Census Bureau, accessed April 7, 2016,  
[https://www.census.gov/govs/apes/historical\\_data\\_1995.html](https://www.census.gov/govs/apes/historical_data_1995.html)

Government Employment and Payroll. “1996 Public Employment Data.” United States Census Bureau, accessed April 7, 2016,  
[https://www.census.gov/govs/apes/historical\\_data\\_1996.html](https://www.census.gov/govs/apes/historical_data_1996.html)

Government Employment and Payroll. “1997 Public Employment Data.” United States Census Bureau, accessed April 7, 2016,  
[https://www.census.gov/govs/apes/historical\\_data\\_1997.html](https://www.census.gov/govs/apes/historical_data_1997.html)

Government Employment and Payroll. “1998 Public Employment Data.” United States Census Bureau, accessed April 7, 2016,  
[https://www.census.gov/govs/apes/historical\\_data\\_1998.html](https://www.census.gov/govs/apes/historical_data_1998.html)

Government Employment and Payroll. “1999 Public Employment Data.” United States Census Bureau, accessed April 7, 2016,  
[https://www.census.gov/govs/apes/historical\\_data\\_1999.html](https://www.census.gov/govs/apes/historical_data_1999.html)

Government Employment and Payroll. “2000 Public Employment Data.” United States Census Bureau, accessed April 7, 2016,  
[https://www.census.gov/govs/apes/historical\\_data\\_2000.html](https://www.census.gov/govs/apes/historical_data_2000.html)

Government Employment and Payroll. “2001 Public Employment Data.” United States Census Bureau, accessed April 7, 2016,  
[https://www.census.gov/govs/apes/historical\\_data\\_2001.html](https://www.census.gov/govs/apes/historical_data_2001.html)

Government Employment and Payroll. “2002 Public Employment Data.” United States Census Bureau, accessed April 7, 2016,  
[https://www.census.gov/govs/apes/historical\\_data\\_2002.html](https://www.census.gov/govs/apes/historical_data_2002.html)

Government Employment and Payroll. “2003 Public Employment Data.” United States Census

Bureau, accessed April 7, 2016,  
[https://www.census.gov//govs/apes/historical\\_data\\_2003.html](https://www.census.gov//govs/apes/historical_data_2003.html)

Government Employment and Payroll. “2004 Public Employment Data.” United States Census Bureau, accessed April 7, 2016,  
[https://www.census.gov//govs/apes/historical\\_data\\_2004.html](https://www.census.gov//govs/apes/historical_data_2004.html)

Government Employment and Payroll. “2005 Public Employment Data.” United States Census Bureau, accessed April 7, 2016,  
[https://www.census.gov//govs/apes/historical\\_data\\_2005.html](https://www.census.gov//govs/apes/historical_data_2005.html)

Government Employment and Payroll. “2006 Public Employment Data.” United States Census Bureau, accessed April 7, 2016,  
[https://www.census.gov//govs/apes/historical\\_data\\_2006.html](https://www.census.gov//govs/apes/historical_data_2006.html)

Government Employment and Payroll. “2007 Public Employment Data.” United States Census Bureau, accessed April 7, 2016,  
[https://www.census.gov//govs/apes/historical\\_data\\_2007.html](https://www.census.gov//govs/apes/historical_data_2007.html)

Government Employment and Payroll. “2008 Public Employment Data.” United States Census Bureau, accessed April 7, 2016,  
[https://www.census.gov//govs/apes/historical\\_data\\_2008.html](https://www.census.gov//govs/apes/historical_data_2008.html)

Government Employment and Payroll. “2009 Public Employment Data.” United States Census Bureau, accessed April 7, 2016,  
[https://www.census.gov//govs/apes/historical\\_data\\_2009.html](https://www.census.gov//govs/apes/historical_data_2009.html)

Government Employment and Payroll. “2010 Public Employment Data.” United States Census Bureau, accessed April 7, 2016,  
[https://www.census.gov//govs/apes/historical\\_data\\_2010.html](https://www.census.gov//govs/apes/historical_data_2010.html)

Government Employment and Payroll. “2011 Public Employment Data.” United States Census Bureau, accessed April 7, 2016,  
[https://www.census.gov//govs/apes/historical\\_data\\_2011.html](https://www.census.gov//govs/apes/historical_data_2011.html)

Government Employment and Payroll. “2012 Public Employment Data.” United States Census Bureau, accessed April 7, 2016,  
[https://www.census.gov//govs/apes/historical\\_data\\_2012.html](https://www.census.gov//govs/apes/historical_data_2012.html)

Government Employment and Payroll. “2013 Public Employment Data.” United States Census Bureau, accessed April 7, 2016,  
[https://www.census.gov//govs/apes/historical\\_data\\_2013.html](https://www.census.gov//govs/apes/historical_data_2013.html)

## Appendix A: Chapter 2 Alternative Model Specifications

Graph A2.1: Graph of Cox Proportional Hazards Model in Chapter 2

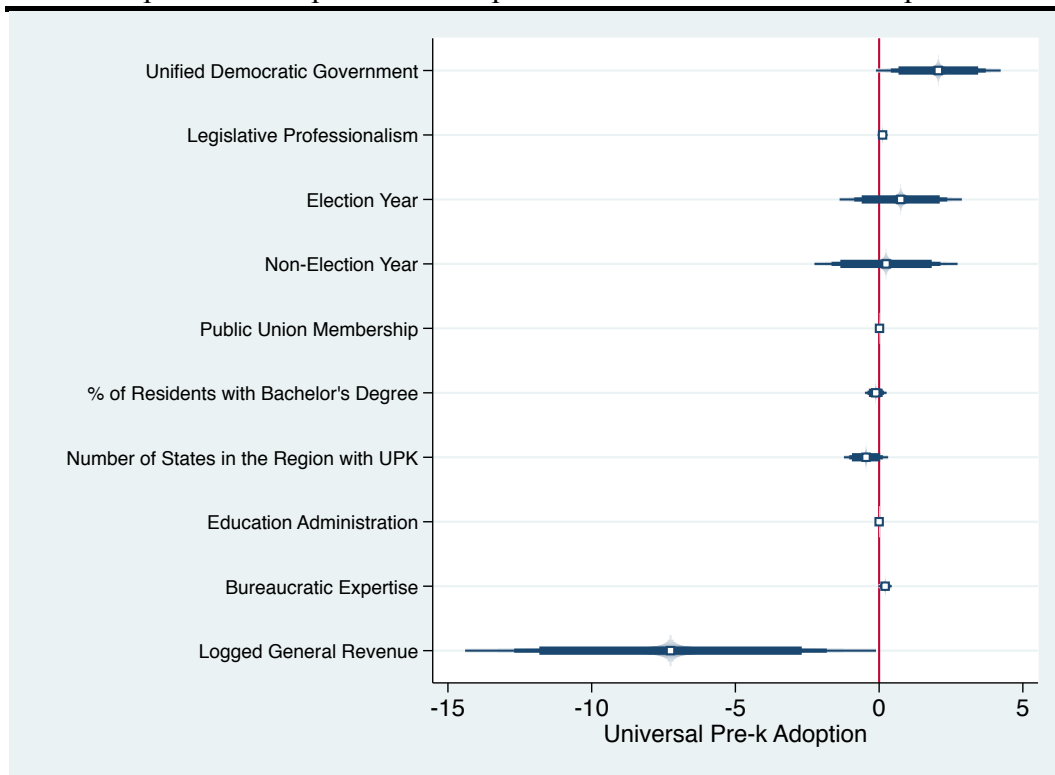


Table A2.1: Cox Proportional Hazards Model with MA Adoption 2004

| <b>Independent Variables</b>          |                  |                     |
|---------------------------------------|------------------|---------------------|
| <i>Political Variables</i>            |                  |                     |
| Unified Democratic Government         | 1.73**<br>(0.79) | 2.39***<br>(0.91)   |
| Legislative Professionalism           | 0.02<br>(0.05)   | 0.19***<br>(0.07)   |
| Election Year                         | 0.36<br>(0.83)   | 0.69<br>(0.77)      |
| Non-Election Year                     | -0.27<br>(0.91)  | 0.46<br>(0.78)      |
| Public Union Membership               | 0.02<br>(0.03)   | 0.04<br>(0.04)      |
| <i>State Characteristics</i>          |                  |                     |
| Logged Under 5 Population             | 0.28<br>(1.47)   | 11.03<br>(8.40)     |
| % of Residents with Bachelor's Degree | -0.12<br>(0.13)  | -0.005<br>(0.14)    |
| <i>Geographic Proximity</i>           |                  |                     |
| State in Region has UPK               | 0.49<br>(0.89)   | 1.10<br>(1.32)      |
| <i>Implementation Variables</i>       |                  |                     |
| Education Administration              |                  | 0.002***<br>(0.001) |
| State Level Regulations-Standards     |                  | 0.40<br>(1.98)      |
| Bureaucracy Appoints                  |                  | 2.39*<br>(1.30)     |
| Logged General Revenue                |                  | -20.83**<br>(9.63)  |
| Observations                          | 899              | 899                 |
| Log PseudoLikelihood                  | -49.644641       | -35.153889          |
| Wald Chi2(8)                          | 21.49            |                     |
| Wald Chi2(12)                         |                  | 110.32              |
| Prob > Chi2                           | 0.006            | 0.00                |

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; Standard errors are clustered by state; Reference categories: divided or Republican controlled government, non-election year, election year or the year after, state in region does not have universal pre-k, other appointment method of chief education official.

Table A2.2: Cox Proportional Hazards Model with Fraction of Neighbors as Measure of Geographic Proximity

|                                              | Coefficients     | Coefficients         |
|----------------------------------------------|------------------|----------------------|
| <b>Independent Variables</b>                 |                  |                      |
| <i>Political Variables</i>                   |                  |                      |
| Unified Democratic Government                | 1.78**<br>(0.81) | 2.34***<br>(0.86)    |
| Legislative Professionalism                  | 0.02<br>(0.04)   | 0.17***<br>(0.04)    |
| Election Year                                | 0.36<br>(0.82)   | 0.62<br>(0.81)       |
| Non-Election Year                            | -0.26<br>(0.89)  | 0.42<br>(0.72)       |
| Public Union Membership                      | 0.02<br>(0.03)   | 0.03<br>(0.03)       |
| <i>State Characteristics</i>                 |                  |                      |
| Logged Under 5 Population                    | 0.399<br>(1.38)  | 9.09<br>(6.72)       |
| % of Residents with Bachelor's Degree        | -0.15<br>(0.12)  | -0.03<br>(0.14)      |
| <i>Geographic Proximity</i>                  |                  |                      |
| Fraction of Neighbors with UPK               | 0.99<br>(1.897)  | 1.95<br>(2.90)       |
| <i>Implementation Variables</i>              |                  |                      |
| Size of Education Bureaucracy                |                  | 0.002***<br>(0.0005) |
| State Level Regulations-Standards            |                  | 0.82<br>(1.69)       |
| Bureaucracy Selects Chief Education Official |                  | 2.49**<br>(1.20)     |
| Logged General Revenue                       |                  | -18.39***<br>(7.14)  |
| Observations                                 | 900              | 900                  |
| Log PseudoLikelihood                         | -49.384904       | -36.209262           |
| Wald Chi2(8/12)                              | 14.86            | 180.28               |
| Prob > Chi2                                  | 0.0618           | 0.00                 |

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; Standard errors are clustered by state; Reference categories: divided or Republican controlled government, non-election year, election year or the year after, other appointment method of chief education official.

## Appendix B: Chapter 3 Alternative Model Specifications

Graph B3.1: Graph of OLS Model

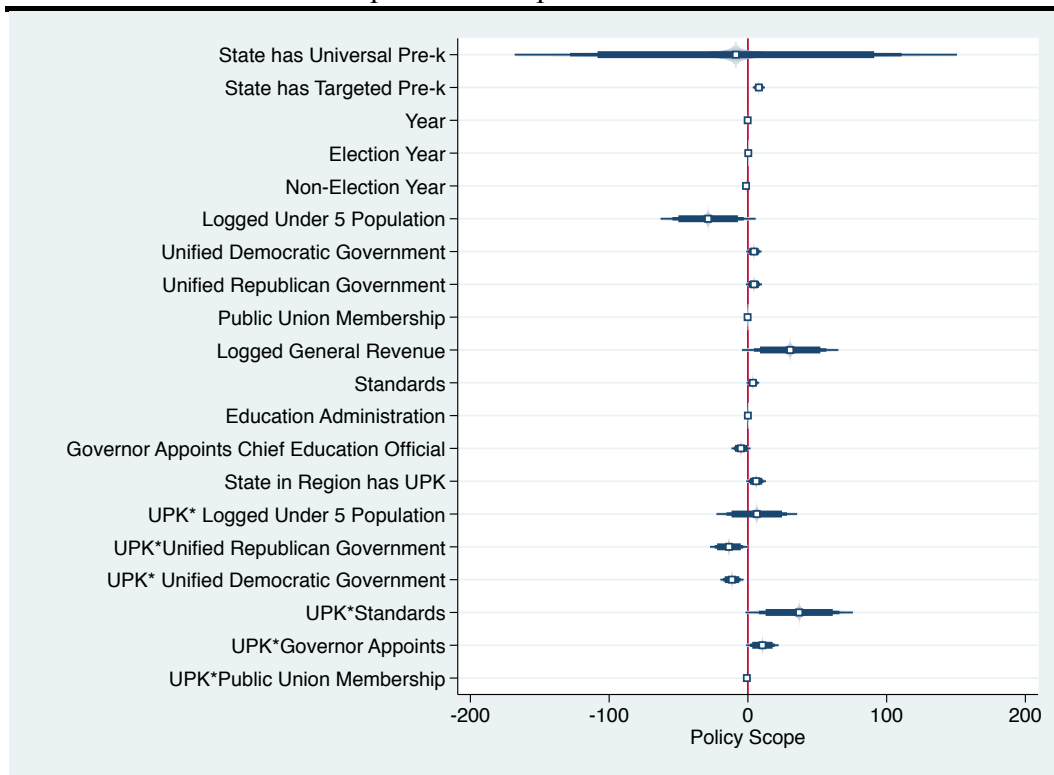


Table B3.1: OLS Regression with MA Adopting 2004

| Independent Variables                          | Coefficients       | Coefficients        |
|------------------------------------------------|--------------------|---------------------|
| State has Universal Pre-k                      | 30.24***<br>(5.68) | -8.68<br>(59.47)    |
| State has Targeted Pre-k                       | 8.06***<br>(1.69)  | 7.89***<br>(1.63)   |
| Year                                           | 0.01<br>(0.33)     | -0.13<br>(0.30)     |
| Election Year                                  | 0.26<br>(0.30)     | 0.29<br>(0.33)      |
| Non-Election Year                              | -1.51<br>(1.01)    | -1.30<br>(0.98)     |
| Logged Under 5 Population                      | -20.30*<br>(11.88) | -28.65**<br>(12.79) |
| Unified Democratic Government                  | 2.14<br>(1.93)     | 4.36**<br>(2.05)    |
| Unified Republican Government                  | 3.59*<br>(1.96)    | 4.39**<br>(2.17)    |
| Public Union Membership                        | -0.27***<br>(0.07) | -0.19***<br>(0.07)  |
| Logged General Revenue                         | 19.59<br>(13.32)   | 30.49**<br>(12.97)  |
| State Level Regulations- Standards             | 5.53***<br>(2.01)  | 3.59**<br>(1.69)    |
| Size of Education Bureaucracy                  | 0.002<br>(0.002)   | 0.001<br>(0.002)    |
| Governor Appoints Chief Education Official     | -2.78<br>(2.59)    | -4.99*<br>(2.56)    |
| State in Region has UPK                        | 6.37**<br>(2.64)   | 5.92**<br>(2.64)    |
| UPK*Logged Under 5 Population                  |                    | 6.40<br>(10.84)     |
| UPK*Unified Republican Government              |                    | -13.65**<br>(5.10)  |
| UPK*Unified Democratic Government              |                    | -11.48***<br>(3.11) |
| UPK*Standards                                  |                    | 36.99**<br>(14.43)  |
| UPK*Governor Appoints Chief Education Official |                    | 10.48**<br>(4.38)   |
| UPK*Public Union Membership                    |                    | -0.75***<br>(0.23)  |
| Constant                                       | -55.45<br>(632.1)  | 203.4<br>(573.4)    |

|              |       |       |
|--------------|-------|-------|
| Observations | 643   | 643   |
| R-squared    | 0.577 | 0.657 |
| Prob > F     | 0.00  | 0.00  |

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; Standard errors are clustered by state; Reference categories: state does not have a pre-k program, non-election year, election year or the year after, divided government, state does not have early childhood standards, other appointment method of chief education official.

Table B3.2: OLS Regression with Fraction of Neighbors with UPK

|                                            | Coefficients       | Coefficients        |
|--------------------------------------------|--------------------|---------------------|
| <b>Independent Variables</b>               |                    |                     |
| State has Universal Pre-k                  | 33.96***<br>(5.93) | 16.27<br>(62.00)    |
| State has Targeted Pre-k                   | 7.63***<br>(1.38)  | 7.19***<br>(1.20)   |
| Year                                       | 0.06<br>(0.34)     | -0.09<br>(0.31)     |
| Election Year                              | 0.296<br>-0.34     | 0.30<br>-0.39       |
| Non-Election Year                          | -1.47*<br>(0.85)   | -1.21<br>(0.83)     |
| Logged Under 5 Population                  | -18.52*<br>(10.54) | -25.95**<br>(11.23) |
| Unified Democratic Government              | 2.20<br>(2.18)     | 4.28*<br>(2.27)     |
| Unified Republican Government              | 3.39*<br>(1.96)    | 4.39**<br>(2.11)    |
| Public Union Membership                    | -0.23***<br>(0.07) | -0.16**<br>(0.07)   |
| <i>Implementation Variables</i>            |                    |                     |
| Logged General Revenue                     | 16.90<br>(13.05)   | 28.04**<br>-12.61   |
| State Level Regulations- Standards         | 5.07**<br>(2.01)   | 2.73*<br>(1.42)     |
| Size of Education Bureaucracy              | 0.002<br>(0.002)   | 0.001<br>(0.002)    |
| Governor Appoints Chief Education Official | -2.35<br>(2.52)    | -3.96<br>(2.41)     |
| <i>Geographic Proximity</i>                |                    |                     |
| Fraction of Neighbors with UPK             | 14.35<br>(10.66)   | 16.37<br>(10.75)    |
| <i>Interaction Terms</i>                   |                    |                     |
| UPK*Logged Under 5 Population              |                    | 2.63<br>(11.43)     |
| UPK*Unified Republican Government          |                    | -15.95***<br>(5.66) |
| UPK*Unified Democratic Government          |                    | -12.25***<br>(3.53) |
| UPK*Standards                              |                    | 39.31**<br>(15.13)  |

|                                                |                     |                    |
|------------------------------------------------|---------------------|--------------------|
| UPK*Governor Appoints Chief Education Official |                     | 6.45<br>(4.67)     |
| UPK*Public Union Membership                    |                     | -0.78***<br>(0.25) |
| Constant                                       | -138.70<br>(635.80) | 124.60<br>(581.60) |
| Observations                                   | 643                 | 643                |
| R-squared                                      | 0.571               | 0.657              |
| Prob > F                                       | 0.00                | 0.00               |

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; Standard errors are clustered by state; Reference categories: state does not have a pre-k program, non-election year, election year or the year after, divided government, state does not have early childhood standards, other appointment method of chief education official.

Table B3.3: OLS Regression with Targeted Pre-k States (excluding pilot status)

|                                            | Coefficients       | Coefficients        |
|--------------------------------------------|--------------------|---------------------|
| <b>Independent Variables</b>               |                    |                     |
| State has Universal Pre-k                  | 30.11***<br>(5.70) | -65.65<br>(43.37)   |
| State has Targeted Pre-k                   | 7.98***<br>(1.60)  | 7.53***<br>(1.50)   |
| Year                                       | -0.04<br>(0.33)    | -0.21<br>(0.30)     |
| Election Year                              | 0.33<br>(0.32)     | 0.60<br>(0.40)      |
| Non-Election Year                          | -1.42<br>(0.98)    | -1.16<br>(0.97)     |
| Logged Under 5 Population                  | -21.36*<br>(11.86) | -32.13**<br>(14.40) |
| Unified Democratic Government              | 1.98<br>(1.92)     | 4.13**<br>(2.03)    |
| Unified Republican Government              | 3.26<br>(1.96)     | 4.21*<br>(2.20)     |
| Public Union Membership                    | -0.28***<br>(0.07) | -0.21***<br>(0.07)  |
| <i>Implementation Variables</i>            |                    |                     |
| Logged General Revenue                     | 21.33<br>(13.31)   | 34.07**<br>(14.20)  |
| State Level Regulations- Standards         | 5.42***<br>(1.99)  | 4.87**<br>(2.16)    |
| Size of Education Bureaucracy              | 0.001<br>(0.002)   | 0.001<br>(0.002)    |
| Governor Appoints Chief Education Official | -2.14<br>(2.56)    | -4.597*<br>(2.73)   |
| <i>Regional Proximity</i>                  |                    |                     |
| State in Region has UPK                    | 6.31**<br>(2.63)   | 5.52**<br>(2.64)    |
| <i>Interaction Terms</i>                   |                    |                     |
| UPK*Logged Under 5 Population              |                    | 22.28**<br>(8.61)   |
| UPK*Unified Republican Government          |                    | -20.99***<br>-6.859 |
| UPK*Unified Democratic Government          |                    | -9.71***<br>(2.86)  |

|                                                  |                   |                    |
|--------------------------------------------------|-------------------|--------------------|
| UPK*Standards                                    |                   | 12.39**<br>(5.30)  |
| UPK*Governor Appoints Chief Education Official   |                   | 14.16***<br>(4.30) |
| UPK*Bureaucracy Selects Chief Education Official |                   |                    |
| UPK*Public Union Membership                      |                   | -0.85***<br>(0.23) |
| Constant                                         | 36.31<br>(631.40) | 346.90<br>(575.00) |
| Observations                                     | 643               | 630                |
| R-squared                                        | 0.58              | 0.641              |
| Prob > F                                         | 0.00              | 0.00               |

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; Standard errors are clustered by state; Reference categories: state does not have a pre-k program, non-election year, election year or the year after, divided government, state does not have early childhood standards, other appointment method of chief education official.

Table B3.4: OLS Regression with Percent of Women Employed

|                                                | Coefficients       | Coefficients        |
|------------------------------------------------|--------------------|---------------------|
| <b>Independent Variables</b>                   |                    |                     |
| State has Universal Pre-k                      | 30.71***<br>(5.77) | -9.26<br>(60.69)    |
| State has Targeted Pre-k                       | 8.07***<br>(1.68)  | 7.90***<br>(1.61)   |
| Year                                           | 0.02<br>(0.33)     | -0.14<br>(0.29)     |
| Election Year                                  | 0.27<br>(0.31)     | 0.29<br>(0.33)      |
| Non-Election Year                              | -1.48<br>(0.95)    | -1.30<br>(0.93)     |
| Logged Under 5 Population                      | -20.44*<br>(12.11) | -28.64**<br>(12.85) |
| Unified Democratic Government                  | 2.21<br>(2.01)     | 4.35**<br>(2.08)    |
| Unified Republican Government                  | 3.53*<br>(1.93)    | 4.40**<br>(2.12)    |
| Public Union Membership                        | -0.27***<br>(0.07) | -0.19**<br>(0.07)   |
| Percent Women Employed                         | 0.09<br>(0.36)     | -0.01<br>(0.36)     |
| <i>Implementation Variables</i>                |                    |                     |
| Logged General Revenue                         | 19.91<br>(14.02)   | 30.46**<br>(13.44)  |
| State Level Regulations- Standards             | 5.55***<br>(2.02)  | 3.59**<br>(1.73)    |
| Education Administration                       | 0.002<br>(0.002)   | 0.001<br>(0.002)    |
| Governor Appoints Chief Education Official     | -2.93<br>(2.78)    | -4.97*<br>(2.69)    |
| <i>Regional Proximity</i>                      |                    |                     |
| State in Region has UPK                        | 6.29**<br>(2.48)   | 5.93**<br>(2.48)    |
| <i>Interaction Terms</i>                       |                    |                     |
| UPK*Logged Under 5 Population                  |                    | 6.49<br>(10.94)     |
| UPK*Unified Republican Government              |                    | -13.70***<br>(5.03) |
| UPK*Unified Democratic Government              |                    | -11.47***<br>(3.16) |
| UPK*Standards                                  |                    | 37.04**<br>(14.50)  |
| UPK*Governor Appoints Chief Education Official |                    | 10.50**<br>(4.47)   |
| UPK*Public Union Membership                    |                    | -0.75***<br>(0.23)  |
| Constant                                       | -86.11<br>-620     | 207.30<br>-552.50   |

|              |       |       |
|--------------|-------|-------|
| Observations | 643   | 643   |
| R-squared    | 0.577 | 0.657 |
| Prob > F     | 0.00  | 0.00  |

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; Standard errors are clustered by state; Reference categories: state does not have a pre-k program, non-election year, election year or the year after, divided government, state does not have early childhood standards, other appointment method of chief education official.

## Appendix C: Chapter 4 Alternative Model Specifications

Graph C4.1: Graph of Cox Proportional Hazards Model

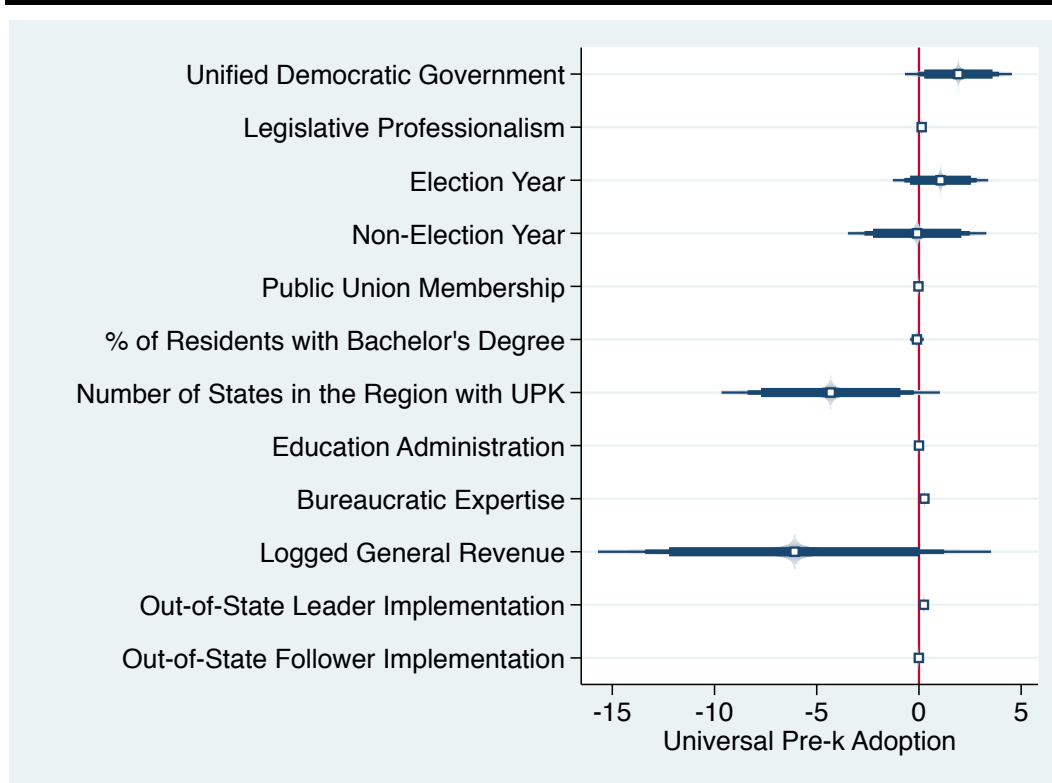


Table C4.1: Cox Proportional Hazards Model with Limited Variables

|                                  | Coefficients        | Hazards             |
|----------------------------------|---------------------|---------------------|
| <b>Independent Variables</b>     |                     |                     |
| Unified Democratic Government    | 1.61**<br>(0.70)    | 4.99**<br>(3.47)    |
| Legislative Professionalism      | 0.14*<br>(0.08)     | 1.15*<br>(0.09)     |
| Election Year                    | 1.01<br>(0.85)      | 2.75<br>(2.34)      |
| # of States in Region with UPK   | -4.896**<br>(2.29)  | 0.01**<br>(0.02)    |
| Size of Education Bureaucracy    | 0.002***<br>(0.001) | 1.002***<br>(0.001) |
| Bureaucratic Expertise           | 0.26***<br>(0.10)   | 1.293***<br>(0.13)  |
| Logged General Revenue           | -7.29**<br>(3.10)   | 0.001**<br>(0.002)  |
| Leader Out-of-State Enrollment   | 0.240***<br>(0.08)  | 1.27***<br>(0.10)   |
| Follower Out-of-State Enrollment | 0.03<br>(0.03)      | 1.03<br>(0.03)      |
| Observations                     | 900                 |                     |
| Log Psuedolikelihood             | -31.395851          |                     |
| Wald Chi2(9)                     | 106.31              |                     |
| Prob>Chi2                        | 0.00                |                     |

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; Standard errors are clustered by state; Reference categories: divided or Republican controlled government, non-election year.

Table C4.2: Cox Proportional Hazards Model with State in Region has UPK

|                                      | Coefficients        | Hazards             |
|--------------------------------------|---------------------|---------------------|
| <i>Independent Variables</i>         |                     |                     |
| <i>Political Variables</i>           |                     |                     |
| Unified Democratic Government        | 2.19**<br>(0.93)    | 8.90**<br>(8.23)    |
| Legislative Professionalism          | 0.15**<br>(0.07)    | 1.16**<br>(0.08)    |
| Election Year                        | 0.68<br>(0.84)      | 1.98<br>(1.66)      |
| Non Election Year                    | 0.26<br>(0.96)      | 1.30<br>(1.24)      |
| <i>State Characteristics</i>         |                     |                     |
| Public Union Membership              | -0.01<br>(0.05)     | 0.989<br>(0.05)     |
| % of Residents with Bachelors Degree | -0.14<br>(0.16)     | 0.87<br>(0.14)      |
| <i>Geographic Proximity</i>          |                     |                     |
| State in Region has UPK              | -1.65<br>(2.03)     | 0.19<br>(0.39)      |
| <i>Implementation Variables</i>      |                     |                     |
| Size of Education Bureaucracy        | 0.001**<br>(0.001)  | 1.001**<br>(0.001)  |
| Bureaucratic Expertise               | 0.203**<br>(0.09)   | 1.22***<br>(0.11)   |
| Logged General Revenue               | -6.76**<br>(3.26)   | 0.001***<br>(0.004) |
| <i>Out-of-State Implementation</i>   |                     |                     |
| Out-of-State Leader Implementation   | 0.0920*<br>(0.05)   | 1.096*<br>(0.06)    |
| Out-of-State Follower Implementation | -0.0663**<br>(0.03) | 0.935**<br>(0.03)   |
| Observations                         | 900                 |                     |
| Log Psuedolikelihood                 | -38.9062            |                     |
| Wald Chi2(13)                        | 46.29               |                     |
| Prob>Chi2                            | 0.00                |                     |

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; Standard errors are clustered by state; Reference categories: divided or Republican controlled government, non-election year, election year or the year after, state in region does not have upk, other appointment method of chief education official.

Table C4.3: Cox Proportional Hazards Model with MA Adoption  
2004

|                                       | Coefficients       |
|---------------------------------------|--------------------|
| <b>Independent Variables</b>          |                    |
| <i>Political Variables</i>            |                    |
| Unified Democratic Government         | 1.88*<br>(1.08)    |
| Legislative Professionalism           | 0.15<br>(0.10)     |
| Election Year                         | 1.14<br>(0.95)     |
| Non-Election Year                     | 0.12<br>(1.49)     |
| Public Union Membership               | -0.03<br>(0.06)    |
| <i>State Characteristics</i>          |                    |
| % of Residents with Bachelor's Degree | -0.06<br>(0.16)    |
| <i>Geographic Proximity</i>           |                    |
| # of States in the Region with UPK    | -4.63*<br>(2.57)   |
| <i>Implementation Variables</i>       |                    |
| Size of Education Bureaucracy         | 0.002**<br>(0.001) |
| Bureaucratic Expertise                | 0.28***<br>(0.07)  |
| Logged General Revenue                | -6.71<br>(4.29)    |
| <i>Out-of-State Implementation</i>    |                    |
| Out-of-State Leader Enrollment        | 0.26**<br>(0.11)   |
| Out-of-State Follower Enrollment      | -0.01<br>(0.06)    |
| Observations                          | 899                |
| Log PseudoLikelihood                  | -28.836265         |
| Wald Chi2(12)                         | 403.82             |
| Prob > Chi2                           | 0.00               |

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; Standard errors are clustered by state; Reference categories: divided or Republican controlled government, non-election year, election year or the year after.

Table C4.4: Cox Proportional Hazards Model with Fraction of  
Neighbors with Universal Pre-k

| Independent Variables                 | Coefficients       |
|---------------------------------------|--------------------|
| <i>Political Variables</i>            |                    |
| Unified Democratic Government         | 2.12**<br>(0.83)   |
| Legislative Professionalism           | 0.16*<br>(0.09)    |
| Election Year                         | 0.64<br>(0.78)     |
| Non-Election Year                     | 0.18<br>(0.90)     |
| Public Union Membership               | -0.02<br>(0.05)    |
| <i>State Characteristics</i>          |                    |
| % of Residents with Bachelor's Degree | -0.05<br>(0.15)    |
| <i>Geographic Proximity</i>           |                    |
| Fraction of Neighbors with UPK        | -2.72<br>(3.42)    |
| <i>Implementation Variables</i>       |                    |
| Size of Education Bureaucracy         | 0.002**<br>(0.001) |
| Bureaucratic Expertise                | 0.21**<br>(0.10)   |
| Logged General Revenue                | -7.37**<br>(3.68)  |
| <i>Out-of-State Implementation</i>    |                    |
| Out-of-State Leader Enrollment        | 0.07<br>(0.05)     |
| Out-of-State Follower Enrollment      | -0.06<br>(0.04)    |
| Observations                          | 900                |
| Log PseudoLikelihood                  | -38.733947         |
| Wald Chi2(12)                         | 50.22              |
| Wald Chi2(13)                         |                    |
| Prob > Chi2                           | 0.00               |

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1;  
Standard errors are clustered by state; Reference categories: divided or  
Republican controlled government, non-election year, election year or the  
year after, other appointment process.

Table C4.5: Cox Proportional Hazards Model with Standards

|                                       | Coefficients        |
|---------------------------------------|---------------------|
| <b>Independent Variables</b>          |                     |
| <i>Political Variables</i>            |                     |
| Unified Democratic Government         | 1.78*<br>(0.92)     |
| Legislative Professionalism           | 0.09<br>(0.07)      |
| Election Year                         | 0.95<br>(0.78)      |
| Non-Election Year                     | -0.098<br>(1.09)    |
| Public Union Membership               | -0.02<br>(0.06)     |
| <i>State Characteristics</i>          |                     |
| % of Residents with Bachelor's Degree | -0.06<br>(0.14)     |
| <i>Geographic Proximity</i>           |                     |
| # of States in Region with UPK        | -3.91**<br>(1.76)   |
| <i>Implementation Variables</i>       |                     |
| Size of Education Bureaucracy         | 0.002***<br>(0.001) |
| State Level Regulations-Standards     | -0.46<br>(1.53)     |
| Logged General Revenue                | -5.69*<br>(3.15)    |
| <i>Out-of-State Implementation</i>    |                     |
| Out-of-State Leader Enrollment        | 0.22***<br>(0.07)   |
| Out-of-State Follower Enrollment      | -0.01<br>(0.05)     |
| Observations                          | 900                 |
| Log PsuedoLikelihood                  | -32.818493          |
| Wald Chi2(12)                         | 461.78              |
| Prob > Chi2                           | 0.00                |

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; Standard errors are clustered by state; Reference categories: divided or Republican controlled government, non-election year, election year or the year after, state does not have early learning standards.

Table C4.6: Cox Proportional Hazards Model with Percent of Women in the Workforce

|                                       | Coeff.     | Hazards | Coeff.     | Hazards  | Coeff.    | Hazards  |
|---------------------------------------|------------|---------|------------|----------|-----------|----------|
| <b>Independent Variables</b>          |            |         |            |          |           |          |
| <i>Political Variables</i>            |            |         |            |          |           |          |
| Unified Democratic Government         | 1.67*      | 5.31*   | 2.003**    | 7.41**   | 2.03**    | 7.63**   |
|                                       | (0.93)     | (4.91)  | (0.80)     | (5.94)   | (0.99)    | 7.52     |
| Legislative Professionalism           | 0.02       | 1.02    | 0.13*      | 1.14*    | 0.13*     | 1.14*    |
|                                       | (0.02)     | (0.02)  | (0.08)     | (0.09)   | (0.07)    | (0.08)   |
| Election Year                         | 0.35       | 1.42    | 0.77       | 2.16     | 1.13      | 3.11     |
|                                       | (0.78)     | (1.10)  | (0.85)     | (1.84)   | (0.76)    | (2.35)   |
| Non-Election Year                     | -0.34      | 0.71    | 0.18       | 1.19     | 0.12      | 1.12     |
|                                       | (0.79)     | (0.57)  | (0.89)     | (1.06)   | (0.81)    | (0.91)   |
| Public Union Membership               | 0.01       | 1.01    | 0.02       | 1.02     | -0.03     | 0.97     |
|                                       | (0.03)     | (0.03)  | (0.03)     | (0.03)   | (0.06)    | (0.06)   |
| <i>State Characteristics</i>          |            |         |            |          |           |          |
| % of Residents with Bachelor's Degree | -0.12      | 0.88    | -0.06      | 0.94     | -0.14     | 0.87     |
|                                       | (0.12)     | (0.11)  | (0.16)     | (0.15)   | (0.16)    | (.14)    |
| % of Women in Workforce               | -0.06      | 0.94    | -0.13      | 0.88     | 0.10      | 1.10     |
|                                       | (0.12)     | (0.11)  | (0.17)     | (0.15)   | (0.18)    | (0.20)   |
| <i>Geographic Proximity</i>           |            |         |            |          |           |          |
| # of States in the Region with UPK    | -0.28      | 0.76    | -0.46      | 0.63     | -4.79*    | 0.01     |
|                                       | (0.24)     | (0.18)  | (0.30)     | (.19)    | (2.78)    | (0.02)   |
| <i>Implementation Variables</i>       |            |         |            |          |           |          |
| Education Administration              |            |         | 0.002***   | 1.002*** | 0.002***  | 1.002*** |
|                                       |            |         | (0.001)    | (0.001)  | (0.001)   | (0.001)  |
| Bureaucratic Expertise                |            |         | 0.22**     | 1.25**   | 0.28***   | 1.32***  |
|                                       |            |         | (0.10)     | (0.13)   | (0.06)    | (0.08)   |
| Logged General Revenue                |            |         | -8.19**    | 0.0003** | -5.63     | 0.004    |
|                                       |            |         | (3.70)     | (0.001)  | (3.72)    | (0.01)   |
| Out-of-State Leader Enrollment        |            |         |            |          | 0.27**    | 1.30**   |
|                                       |            |         |            |          | (0.12)    | (0.16)   |
| Out-of-State Follower Enrollment      |            |         |            |          | 0.0003    | 1.0003   |
|                                       |            |         |            |          | (0.04)    | (0.04)   |
| Observations                          | 900        |         | 900        |          | 900       |          |
| Log Pseudolikelihood                  | -48.861743 |         | -39.238546 |          | -29.90416 |          |
| Wald Chi2(8)                          | 13.8       |         |            |          |           |          |
| Wald Chi2(11)                         |            |         | 28.18      |          |           |          |
| Wald Chi2(13)                         |            |         |            |          | 487.05    |          |
| Prob > Chi2                           | 0.0872     |         | 0.003      |          | 0         |          |

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; Standard errors are clustered by state;  
Reference categories: divided or Republican controlled government, non-election year, election year or the year after.

## **Appendix D: Data Collection**

### State Pre-kindergarten Program

This is the variable that indicates whether the state has a state pre-kindergarten program and whether it is universal. I used the NIEER yearbook to determine when the universal program started.

### Percent of Four-Year-Olds Enrolled in State Pre-k Programs

I downloaded each NIEER yearbook and used the percentage of students enrolled for this variable. If the data was for the 2001-2002 school year, I used that data as enrollment in 2001. The school year 2003-2004 is missing. However, the 2004 Yearbook has 2002-2003 and 2003-2004 data.

### Party of the Governor and Legislature

I gathered the data from Ballotpedia for years 1995 on. It is a lagged variable for the implementation model. If one of the houses was split or divided, I coded the legislature as divided. I also coded government as divided if the governorship was independent, the legislature was independent, or the legislature was Democratic-Farm Laborer or nonpartisan. The data from Ballotpedia goes until 2013. For the 2014 data I used the National Council of State Legislatures' 2014 State and Legislative Partisan Competition page.

### Under 5 Population

I gathered this data from the U.S. Census population historical estimates data. I went to State Tables and selected the State Population Estimates and Demographic Components of

Population Change: Annual Time Series, April 1, 1990 to July 1, 1999 for the population data in the 1990s. I also did this for the 2000s data. Some of the options were state estimates by age and I would choose that option for the under 5 population. For years after 2010, I used the American Fact Finder. I collected the 1990s data from the Population Estimates for the 1990s. This variable is lagged.

#### Educational Attainment (Percentage of residents with a Bachelor's Degree)

For years 1995-2010 I used the U.S. Census educational attainment data and from 2011 to 2014 I used the census American Fact Finder. I went to the Census' data tables on education attainment at (<http://www.census.gov/hhes/socdemo/education/data/cps/index.html>). I chose historical educational attainment reports and tables from previous years. I then chose each year and Table 13 Educational Attainment of the Population 25 Years and Over, by State. This is educational attainment for those that are 25 years and older.

#### Public Union Membership

I gathered this data from Unionstats.com. I downloaded the Union Membership, Coverage, Density and Employment by State excel document for each year. I gathered the percentage of members in the public sector for each state and year.

#### Election Year Variables

I created this variable to indicate whether there was a gubernatorial election. I gathered this data from Ballotpedia. Ballotpedia has information on how far apart gubernatorial elections are and the timing of the most recent election. From this information, I was able to figure out

when there were elections over 25 years. Almost all states have elections on even years. However, a few states do not. For example, Mississippi (odd years, both houses have 4 year terms), Louisiana (odd years, both houses have 4 year terms), Virginia (odd years, Senate 4 year and House 2 year terms), and New Jersey (House is on odd years every two years and the Senate is odd years but 2-4-4 so first terms of the decade are 2 year).

#### Size of the Education Bureaucracy

I gathered this data from the Government and Payroll section of the United States Census. I used the historical data section ([https://www.census.gov//govs/apes/historical\\_data\\_1992.html](https://www.census.gov//govs/apes/historical_data_1992.html)) to gather the yearly state government excel sheets. I gathered the number of “Other Education” employees in each state.

#### Appointment Method of the Chief Education Official

I chose the Executive Branch section of the Book of States. Within the Executive Branch section there is a sub-section entitled “Selected Administrative Officials: Method of Collection.” I chose this and followed the coding for the top education official. This variable is not lagged. I noticed that The Book of the States 2003 used information from January 2003. Therefore, I assume the January 2003 responses indicated what the method was before the year 2003 began. Therefore, I used The Book of the States 2003 for the year 2002 because it reflects the appointment method in 2002. For the later years, the data came from March and April of that year. However, because this is still in the first half of the year, I used this information for the prior year.

There was some missing data. I was missing years 1992, 1994, 1996, 1998, and 2000 for all states. If the state had the same election method the entire time (1990-2014) I just inputted that method for the missing years. If the state had the same method in between the missing years (for example one method in 1991 and the same in 1993) then I put that method into 1992 because it is unlikely it changed. For the missing years, the information was used from the Book of States of that year, even though it was from January of that year. I used that year of the Book of States for the prior year and the current year if the method changed the next year.

The Governor Appoints Chief Education Official includes: appointed by governor, appointed by governor and approved by senate, appointed by the governor and approved by the general assembly, appointed by the governor and approved by both houses, appointed by the governor and approved by either houses, appointed by the governor and approved by appropriate legislative committee and senate, appointed by governor and approved by departmental board.

### General Revenue

For the general revenue variable, I gathered the general revenue by state for years 1992-2012 from the U.S. Census' State Government Finance Historical Data section here ([https://www.census.gov//govs/state/historical\\_data.html](https://www.census.gov//govs/state/historical_data.html)). I used American Fact Finder for data from 2012 and 2013 (<http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>). For the information from the U.S. Census, the dollar amounts are in thousands.

### State Level Regulations-Standards

The NIERR began collecting data on early learning standards in their 2005 Yearbook. I gathered the year standards were adopted in each state from the 2005 yearbook to the 2014 Yearbook. If there was discrepancy, I chose the year the state adopted standards in the 2005 Yearbook. I also searched for each state's standards document. Some states included a history section in their standards. I used that information if there was any discrepancy between the Yearbooks. For example, because Mississippi does not have a state program, NIEER did not collect data on their standards. The earliest early learning standards I could find in Mississippi were published in 2006 and I used 2006 as the year they adopted standards.

### Region

I used the United States' Census regions ([http://www2.census.gov/geo/pdfs/maps-data/maps/reference/us\\_regdiv.pdf](http://www2.census.gov/geo/pdfs/maps-data/maps/reference/us_regdiv.pdf)) to divide the 50 states. I used the divisions of West, Midwest, South and Northeast. For all geographic variables, such as the fraction of neighbor's with universal pre-kindergarten or the number of states in a region with universal pre-kindergarten, this U.S. Census map was also used.

### Leader and Follower Out-of-State Implementation

I used the previously gathered region and enrollment data to create these two variables. The leader variable includes the enrollment data of the leading state and the follower variable includes enrollment from the second state that adopted universal pre-kindergarten. Each state was assigned the leader and follower enrollment data from the leader and follower state in their region. For example, Georgia was the leader in the South. Therefore, states in the South (i.e.

Alabama, Tennessee, etc) have Georgia's enrollment as their leader out-of-state implementation variable and Oklahoma as their follower out-of-state implementation variable.

## Appendix E: Interviews

I sent emails/online requests or called members of the Boards of Education, members of a state's respective office or department of early learning and the department of education, legislators on committees of education, members of a Governor's policy office/team as well as leaders in the state teachers' unions. If individuals did not respond to my request, I sent a follow-up request. I was able to conduct 16 semi-structured interviews. I interviewed four respondents from Massachusetts, four respondents from Tennessee, five respondents from Georgia, and three respondents from New Jersey. Each interview lasted twenty to thirty minutes. The interviews took place in July, August, and September of 2016.

After conducting the interviews, I contacted my respondents in January of 2017 for a follow up interview. Of those, I was able to conduct 6 follow-up interviews that were semi-structured. I conducted follow-up interviews with one respondent from Massachusetts, two respondents from Tennessee, two respondents from Georgia and one respondent from New Jersey. All five of the follow-up interviews were with elected officials. The interviews lasted between ten and twenty minutes. The interviews were conducted in January, February, and March of 2017.

I chose Georgia, Tennessee, Massachusetts, and New Jersey for interviews because of their different regional, political, and program dynamics. Select characteristics of each of the states are in Table E.1.

Table E.1: State Characteristics

| State         | Scope (2014) | Program   | Adopted | Standards Adopted | # of Bureaucrats (2013) | Region    |
|---------------|--------------|-----------|---------|-------------------|-------------------------|-----------|
| Georgia       | 60%          | Universal | 1995    | 1996              | 3237                    | South     |
| Tennessee     | 19.30%       | Targeted  | 2005    | 2004              | 2066                    | South     |
| Massachusetts | 7.20%        | Universal | 2005    | 2003              | 1090                    | Northeast |
| New Jersey    | 28.60%       | Targeted  | 1998    | 2000              | 2406                    | Northeast |

If the respondent gave consent I recorded the interview then I transcribed each of the interviews under the respondent's unique ID number. The consent form ensures each of the respondents that their identities will be protected. The interviews were semi-structured. The interview questions can be found below. If the respondent was not involved in the adoption/implementation of pre-kindergarten, those questions were skipped. Overall, I tried to discuss the respondent's role in adoption/implementation of pre-k policy and in what capacity, citizen and group support/opposition to pre-k, the extent to which respondents participated in policy learning, the effect of regulations on implementation, and the most challenging/surprising aspects of implementation. Kelly Smith conducted all of the interviews.

#### Original Interview Questions

##### *Topic 1: Involvement in Policy Adoption*

Goal: These kinds of questions will be asked to understand what the participant's role was in the adoption process. I will ask about how they became involved, why they became involved, and if they mobilized anyone else to become involved.

1. Were you involved in adopting universal pre-k/Common Core?
2. What was your role?
3. Did you help mobilize groups and people to support or oppose universal pre-k/Common Core?
4. How did you become involved in adopting universal pre-k/Common Core?
5. What did you learn from being involved in that process?
6. Do you feel like your work was successful in pushing for the adoption of the policy?
7. Did you think about how the policy would be implemented while you were opposing or supporting the policy's adoption?

### *Topic 2: Policy Learning*

Goal: These questions are asking about when implementation will influence diffusion. I am trying to understand whether other state's implementation structured how these individuals thought about adoption and the policy itself.

1. How did you first hear about universal pre-k/ Common Core?
2. Did you use any professional networks or websites to learn more information about the policy?
3. Did you look to other states to learn about how they went about adopting and implementing the policy?
4. Did you ask any contacts in other states about their experiences or thoughts on the policy?
5. Did their experiences influence your views on the policy?
6. Do you think the state was trying to compete with other states? Emulate other states?

### *Topic 3: Involvement in Implementation*

Goal: The goal of these questions is to uncover why states implemented these policies differently and what implementation looked like in these states.

1. Were you involved in implementing universal pre-k/Common Core?
2. When the policy was adopted, what did you think implementation would look like?  
How different has implementation been from your expectations?
3. How did you get involved in implementation?
4. What challenges have you faced during implementation?

5. Have state regulations helped you implement the policy or have they made it more difficult?

6. Have you talked about your implementation experience with contacts in other states?

### Follow Up Interview Questions

#### *Bureaucrats*

1. Do you look for information on pre-k policy?
2. What kinds of sources do you look to when trying to find information on pre-k policy?
3. Do you look to other states to find more information on pre-k policy? In what ways?
4. Do you attend conferences to discuss pre-k policy? Who presents at these conferences?
5. How often do you gather information on pre-k policy?
6. Do you condense that information? If so, do you condense information by creating reports, PowerPoint, or something else? Who usually condenses this information?
7. Who is usually in charge of collecting this information?
8. What do you do with the information once it is collected?
9. Do you give any presentations on the information you collect? If so, who do you usually give presentations to?

#### *Legislators*

1. Do you look for information on pre-k policy?
2. What kinds of sources do you look to when trying to find information on pre-k policy?

3. If you have questions about pre-k policy or other education policies, where do you go to find information on these topics?
4. Do you attend conferences to discuss pre-k policy? Who presents at these conferences?
5. Do you ask bureaucrats for information on pre-k policy? Do bureaucrats request to provide you information on pre-k policy?
6. If you ask bureaucrats for information, how do you contact them? Do you ask for meetings, do they give presentations, or something else?
7. How often do you gather information on pre-k policy?
8. On average, do you use the information provided by the bureaucracy? Why or why not?
9. Is there an example of when you used information provided by the bureaucracy in legislation?

## Appendix F: State Statutes

### Georgia Constitution. art. I, §II, par. VIII.

**Paragraph VIII. *Lotteries and nonprofit bingo games.*** (a) Except as herein specifically provided in this Paragraph VIII, all lotteries, and the sale of lottery tickets, and all forms of pari-mutuel betting and casino gambling are hereby prohibited; and this prohibition shall be enforced by penal laws. (b) The General Assembly may by law provide that the operation of a nonprofit bingo game shall not be a lottery and shall be legal in this state. The General Assembly may by law define a nonprofit bingo game and provide for the regulation of nonprofit bingo games. (c) The General Assembly may by law provide for the operation and regulation of a lottery or lotteries by or on behalf of the state and for any matters relating to the purposes or provisions of this subparagraph. Proceeds derived from the lottery or lotteries operated by or on behalf of the state shall be used to pay the operating expenses of the lottery or lotteries, including all prizes, without any appropriation required by law, and for educational programs and purposes as hereinafter provided. Lottery proceeds shall not be subject to Article VII, Section III, Paragraph II; Article III, Section IX, Paragraph VI(a); or Article III, Section IX, Paragraph IV(c), except that the net proceeds after payment of such operating expenses shall be subject to Article VII, Section III, Paragraph II. Net proceeds after payment of such operating expenses shall be separately accounted for and shall be specifically identified by the Governor in his annual budget presented to the General Assembly as a separate budget category entitled "Lottery Proceeds" and the Governor shall make specific recommendations as to educational programs and educational purposes to which said net proceeds shall be appropriated. In the General Appropriations Act adopted by the General Assembly, the General Assembly shall appropriate all net proceeds of the lottery or lotteries by such separate budget category to educational programs and educational purposes. Such net proceeds shall be used to support improvements and enhancements for educational programs and purposes and such net proceeds shall be used to supplement, not supplant, non-lottery educational resources for educational programs and purposes. The educational programs and educational purposes for which proceeds may be so appropriated shall include only the following: (1) Tuition grants, scholarships, or loans to citizens of this state to enable such citizens to attend colleges and universities located within this state, regardless of whether such colleges or universities are operated by the board of regents, or to attend institutions operated under the authority of the Department of Technical and Adult Education; (2) Voluntary pre-kindergarten; (3) One or more educational shortfall reserves in a total amount of not less than 10 per- cent of the net proceeds of the lottery for the preceding fiscal year; (4) Costs of providing to teachers at accredited public institutions who teach levels K- 12, personnel at public postsecondary technical institutes under the authority of the Department of Technical and Adult Education, and professors and instructors within the University System of Georgia the necessary training in the use and application of computers and advanced electronic instructional technology to implement interactive learning environments in the classroom and to access the state-wide distance learning network; and (5) Capital outlay projects for educational facilities; provided, however, that no funds shall be appropriated for the items listed in paragraphs (4) and (5) of this subsection until all persons eligible for and applying for assistance as provided in paragraph (1) of this subsection have received such assistance, all approved pre-kindergarten programs provided for in paragraph (2) of this subsection have been fully funded, and the education shortfall reserve or reserves provided for in paragraph (3) of this subsection have been fully

funded. (d) On and after January 1, 1995, the holding of raffles by nonprofit organizations shall be lawful and shall not be prohibited by any law enacted prior to January 1, 1994. Laws enacted on or after January 1, 1994, however, may restrict, regulate, or prohibit the operation of such raffles.

New York State Code, §151-1.1-151.1.3.

§ 151-1.1 Scope of Subpart

The purpose of this subpart is to provide four-year-old children with universal opportunity to access prekindergarten programs. This Subpart sets forth procedures and requirements for implementing such programs and making application to the Commissioner of Education.

§ 151-1.2 Definitions

As used in this Subpart:

- 1 Approved expenditures means any expenses for which grant funds may be used, such as, but not limited to, program components, professional salaries, professional development, support services, materials and supplies, administrative support services, transportation services, leasing expenses or other appropriate facilities expenses and other costs as approved by the commissioner. Pursuant to section 3202 of the Education Law, no parent and/or guardian of a child participating in a universal prekindergarten program should be subjected to a fee/charge for the instructional program.
- 2 Eligible agencies shall mean a provider of child care and early education, a day care provider, early childhood program or center or community-based organization including, but not limited to, approved preschool special education program, Head Start, nursery schools, libraries and museums which meet the standards and requirements of this Subpart.
- 3 Eligible child means a child who resides within the school district who is four years of age on or before December 1st of the year in which he or she is enrolled or who will otherwise be first eligible to enter public school kindergarten commencing with the following school year. For a summer only program provided in accordance with the provisions of section 151-1.4(d) of this Subpart, eligible child means a child who resides within the school district who is five years of age on or before December 1st of the year in which he or she is enrolled or who will otherwise be first eligible to enter public school kindergarten commencing with the current school year. Parents and/or guardians may choose, but are not required, to enroll their child(ren) in a universal prekindergarten program. However, upon enrollment, the school district's attendance policy must be applied.
- 4 Universal prekindergarten program plan means a plan approved by the board of education or, in the case of a school district having a population of one million or more, by the community superintendent and chancellor, that is designed to effectively serve eligible children directly through the school district or through collaborative efforts between the school district and an eligible agency or agencies.

§ 151-1.3 Uniform quality standards for all universal prekindergarten classrooms, including both district-based and eligible agency-based classrooms.

(a) Curriculum.

(1) Each school district operating a prekindergarten program shall adopt and implement curricula, aligned with the State learning standards, that ensures continuity with instruction in the early elementary grades and is integrated with the district's instructional program in kindergarten through grade 12.

(2) Each school district operating a prekindergarten program shall provide an early literacy and emergent reading instruction based on effective, evidence-based practices. Essential components of this program shall include: (i) background knowledge; (ii) phonological awareness; (iii) expressive and receptive language; (iv) vocabulary development; and (v) phonemic awareness.

(3) Activities shall be learner-centered and shall be designed and provided in a way that

promotes the child's total growth and development, and ensures that: (i) children are encouraged to be self-assured and independent through a balanced schedule of teacher-initiated and child-initiated learning activities; (ii) instructional materials and equipment shall be arranged in learning centers that promote a balance of individual and small group activities; and (iii) teachers shall use intentional planning to focus instruction to meet differentiated learning styles of students.

(b) Assessments, monitoring and reporting.

(1) School districts shall establish a process for assessing the developmental baseline and progress of all children participating in the program. Such process must at a minimum provide for on-going assessment of the development of language, cognitive and social skills, and ensure that: (i) the instrument(s) used for assessment must be valid and reliable; and (ii) assessment information must be used to inform classroom instruction and professional development.

(2) School districts shall use the results of such assessments to annually monitor and track prekindergarten program effectiveness. A program shall be considered effective if the enrolled children demonstrate significant gains, as determined by the commissioner, in language, cognitive and social skills.

(3) Beginning in the 2008-2009 school year, school districts shall report annually, in a manner and timeline prescribed by the commissioner, the percentage of prekindergarten children making significant gains, as determined by the commissioner, in language, cognitive and social skills. The data shall be made part of school performance reports to parents and/or guardians of preschool children and the public.

(c) Health and nutrition.

(1) All prekindergarten students shall be screened as new entrants as set forth in Part 117 of this Title.

(2) Prekindergarten programs that operate for less than three hours shall provide a nutritional meal and/or snack. Programs operating more than three hours shall provide appropriate meals and snacks to ensure that the nutritional needs of the children are met. Meals and snacks shall be provided in an environment conducive to interaction between staff and children and at a time appropriate to meet the children's needs and provide sufficient time for eating and interaction.

(d) Class size. The maximum class size for a prekindergarten class is 20 children. For classes of up to 18 students, there must be one teacher and one paraprofessional assigned to each class. For classes of 19 or 20 students, there must be one teacher and two paraprofessionals assigned to each class.

(e) Staff qualifications.

(1) Prekindergarten teachers providing instruction through this Part shall possess: (i) a teaching license or certificate valid for service in the early childhood grades pursuant to Part 80 of this Title; or (ii) a teaching license or certificate for students with disabilities valid for service in early childhood grades pursuant to Part 80 of this Title; or (iii) for eligible agencies collaborating with the district to provide prekindergarten services, a bachelor's degree in early childhood education or a related field, or a teaching license or certificate valid for services in the childhood grades pursuant to Part 80 of this Title, and a written plan to obtain a certification valid for service in the early childhood grades within five years; or (iv) eligible agencies collaborating with the district to provide prekindergarten services and licensed by an agency other than the State Education Department may employ staff who meet the standards of the licensing or registering agency, until the beginning of the 2008-2009 school year, at which time all prekindergarten teachers shall meet the qualifications set forth in subparagraphs (i)-(iii) of this paragraph.

(2) Until all universal prekindergarten teachers at an eligible agency site possess a teaching license or certificate valid for services in the early childhood or childhood grades, the agencies operating such programs shall employ an on-site education director during the hours that the prekindergarten program is in operation that will be responsible for program implementation. The on-site director shall possess a teaching license or certificate valid for services in the early childhood or childhood grades pursuant to Part 80 of this Title.

(3) A prekindergarten teaching assistant providing instructional support in a prekindergarten classroom shall meet qualifications pursuant to Part 80 of this Title.

(4) A prekindergarten teacher aide providing support in a prekindergarten classroom shall meet the requirements prescribed by the local board of education.

(f) Fiscal and program oversight. A school district shall monitor compliance by collaborating eligible agencies with all fiscal and program requirements, shall assess student progress in the prekindergarten program, and shall correct any identified deficiencies.

(g) Professional development. Professional development shall be based on the instructional needs of children and shall be provided to prekindergarten teachers and staff in district and agency settings in which prekindergarten services are provided under this Subpart.

(h) Parental involvement. Each school operating a prekindergarten program shall develop procedures to ensure active engagement of parents and/or guardians in the education of their children.

(i) Support services. School districts shall provide, either directly or through referral, support services to children and their families necessary to support the child's participation in the prekindergarten program. Support services must be provided to the maximum extent practicable in the language or mode of communication which the parents and/or guardians and the child best understand. Whenever possible, such support services shall be provided in collaboration with other community organizations in a non-duplicative manner.

Early Childhood Education Programs- Standards, Oklahoma State Code §70-11-103.7.

§70-11-103.7. Early childhood education programs - Standards.

A. Each school district may offer to four-year-old children the opportunity to participate in an early childhood education program.

B. The State Board of Education shall promulgate standards for early childhood education programs for children who are at least four (4) years of age on or before September 1 of the ensuing school year. The standards shall include both half-day programs consisting of not less than two and one-half (2 1/2) hours per school day, and full-day programs of six (6) hours. The standards for all early childhood education programs shall require a certified teacher, as specified in this section, to be present in the classroom for the length of the school day. Such program shall: 1. Be directed toward developmentally appropriate objectives for such children, rather than toward academic objectives suitable for older children; 2. Accommodate the needs of all children and families regardless of socioeconomic circumstances; and 3. Require that any teacher employed by a public school to teach in such early childhood education program shall be certified in early childhood education.

C. The superintendent of any school district providing classroom space or other school facilities for a federally sponsored Head Start program that is planning to make a material change in the arrangement, shall give notice to the director of the Head Start program at least seven (7) days prior to a school board hearing on the matter.

D. A school district may offer such early childhood education program within the district, in cooperation with other districts, through the use of transfers as specified by law, or by contracting with a private or public provider of early childhood education programs, or by contracting for classroom space with a licensed public or private child care provider based upon selection criteria established by the district. If the program is provided through contract with a private or public provider other than a school district, the contract may only be continued if each teacher serving the school on and after January 1, 1993, is certified in early childhood education, except that all teachers, without such certification, hired by such provider prior to January 1, 1993, and serving in the school as an early childhood education teacher shall be required to obtain certification on or before the beginning of the 1996-97 school year. Any person who has been employed as an early childhood educator with the Head Start Program, has a child development associate degree (CDA) and has at least five (5) years of experience in such employment shall be certified in early childhood education for purposes of employment in the public schools of this state to teach in early childhood education for children four (4) years of age and younger; if such person is recertified in child development by the Council for Early Childhood Professional Recognition within five (5) years prior to the expiration of the person's early childhood certificate that was issued by the State Board of Education, such person shall be granted a renewal certificate in early childhood education by the State Board of Education upon expiration of the early childhood certificate. Provided, private or public providers shall meet such other standards required by law and by the State Board of Education.

E. If an early childhood program is provided by a private or public provider pursuant to a contract as authorized in this section, the contract shall address the requirements for implementing the residency program for resident teachers as required in Section 6-195 of this title. Teachers employed by a private or public provider in an early childhood education program provided through contract with a public school district shall receive in salary and/or fringe benefits amounts not less than the amounts specified in the schedule set forth in Section

18-114.14 of this title.

F. The State Board of Education shall promulgate rules to provide for the implementation of such program.

G. An early childhood education program may be offered jointly by school districts that have formed interlocal cooperative agreements pursuant to Section 5-117b of this title.

H. The term "prekindergarten" shall mean early childhood education for purposes of this title.

I. The State Board of Education shall ensure that the standards for early childhood education are aligned with any new subject matter standards adopted pursuant to Section 11-103.6a of this title.

Added by Laws 1989, c. 335, § 3, eff. July 1, 1989. Amended by Laws 1989, 1st Ex.Sess., c. 2, § 16, emerg. eff. April 25, 1990; Laws 1990, c. 263, § 68, operative July 1, 1990; Laws 1991, c. 67, § 6, emerg. eff. April 12, 1991; Laws 1994, c. 205, § 2, eff. Sept. 1, 1994; Laws 1998, c. 204, § 2, eff. July 1, 1998; Laws 1999, c. 355, § 2, eff. July 1, 1999; Laws 2001, c. 403, § 2, eff. July 1, 2001; Laws 2015, c. 217, § 3, eff. Nov. 1, 2015.

**ARTICLE IX  
EDUCATION**

**SECTION 1. Public education.—**

(a) The education of children is a fundamental value of the people of the State of Florida. It is, therefore, a paramount duty of the state to make adequate provision for the education of all children residing within its borders. Adequate provision shall be made by law for a uniform, efficient, safe, secure, and high quality system of free public schools that allows students to obtain a high quality education and for the establishment, maintenance, and operation of institutions of higher learning and other public education programs that the needs of the people may require. To assure that children attending public schools obtain a high quality education, the legislature shall make adequate provision to ensure that, by the beginning of the 2010 school year, there are a sufficient number of classrooms so that: (1) The maximum number of students who are assigned to each teacher who is teaching in public school classrooms for prekindergarten through grade 3 does not exceed 18 students; (2) The maximum number of students who are assigned to each teacher who is teaching in public school classrooms for grades 4 through 8 does not exceed 22 students; and (3) The maximum number of students who are assigned to each teacher who is teaching in public school classrooms for grades 9 through 12 does not exceed 25 students. The class size requirements of this subsection do not apply to extracurricular classes. Payment of the costs associated with reducing class size to meet these requirements is the responsibility of the state and not of local schools districts. Beginning with the 2003-2004 fiscal year, the legislature shall provide sufficient funds to reduce the average number of students in each classroom by at least two students per year until the maximum number of students per classroom does not exceed the requirements of this subsection.

(b) Every four-year old child in Florida shall be provided by the State a high quality pre-kindergarten learning opportunity in the form of an early childhood development and education program which shall be voluntary, high quality, free, and delivered according to professionally accepted standards. An early childhood development and education program means an organized program designed to address and enhance each child's ability to make age appropriate progress in an appropriate range of settings in the development of language and cognitive capabilities and emotional, social, regulatory and moral capacities through education in basic skills and such other skills as the Legislature may determine to be appropriate.

(c) The early childhood education and development programs provided by reason of subparagraph (b) shall be implemented no later than the beginning of the 2005 school year through funds generated in addition to those used for existing education, health, and development programs. Existing education, health, and development programs are those funded by the State as of January 1, 2002 that provided for child or adult education, health care, or development.

**History.**—Am. proposed by Constitution Revision Commission, Revision No. 6, 1998, filed with the Secretary of State May 5, 1998; adopted 1998; Ams. by Initiative Petitions filed with the Secretary of State July 30, 2002, and August 1, 2002; adopted 2002.

WBVE Policy 2525, West Virginia's Universal Access to a Quality Early Education (5252),  
West Virginia Code § 126-28-1-126-28-2.

TITLE 126  
PROCEDURAL RULE  
BOARD OF EDUCATION

SERIES 28

**WEST VIRGINIA'S UNIVERSAL ACCESS TO A QUALITY EARLY EDUCATION (2525)  
§126-28-1. General.**

1.1. Scope. -- This procedural rule establishes the criteria for approving and operating programs for four-year-old children and three-year-old children as mandated under federal law and herein after is referred to as West Virginia Universal Pre-K (hereinafter WV Pre-K).

1.2. Authority. -- W. Va. Constitution, Article XII, §2 and W. Va. Code §§16-3-4, 18-2-5, 18-2E-1 et seq., 18-5-17, 18-5-18c, and 18-5-44. All requirements of this policy are mandated components unless otherwise noted

1.3. Filing Date. – July 14, 2016.

1.4. Effective Date. – August 15, 2016.

1.4.1. Unless specified otherwise within the policy.

1.5. Repeal of former rule. -- This rule amends W. Va. 126CSR28, West Virginia Board of Education (hereinafter WVBE) Policy 2525, West Virginia's Universal Access to a Quality Early Education System (hereinafter Policy 2525), filed October 15, 2015, and effective November 16, 2015.

**§126-28-2. Guidelines.**

2.1. WV Pre-K classrooms shall: 2.1.a. be voluntary; 2.1.b. be readiness programs designed to meet the needs of all eligible children through a holistic approach, including key developmental domains of health and physical development, social and emotional development, language development and communication, cognition and general knowledge, and a child's individual approaches to learning; 2.1.c. maximize existing community, state and federal resources; 2.1.d. be inclusive of all children; 2.1.e. incorporate meaningful ways of communicating with and involving parents/guardians; 2.1.f. be an integral part of a comprehensive West Virginia birth to kindergarten system of education and care; 2.1.g. take place in safe and healthy environments; 2.1.h. establish staffing requirements and class size according to recommended guidelines; 2.1.i. deliver content through the chosen approved curricular framework and the West Virginia Early Learning Standards Framework W. Va. 126CSR44O, WVBE Policy 2520.15, Early Learning Standards Framework Content Standards and Learning Criteria for West Virginia Pre-Kindergarten (hereinafter the Policy 2520.15); 2.1.j. utilize state approved curricular frameworks and assessments to inform and individualize instruction; 2.1.k. build on what children already know in order to consolidate their learning and foster acquisition of new concepts and skills through hands-on active exploration of their learning environment, problem solving, communication, creativity, and use of their imaginations; 2.1.l. view children within the context of their family; 2.1.m. employ staff with strong professional education preparation in child development and early childhood education; and 2.1.n. utilize a comprehensive continuous quality improvement process that includes the compiled

classroom observational measurements and aggregated child outcome data, to evaluate program success and develop school readiness goals.

Massachusetts Universal Pre-k Program, Massachusetts General Laws, Part I, Title II, Chapter 15D, § 13.

Section 13. (a) The board shall, subject to appropriation, establish the Massachusetts universal pre-kindergarten program to assist in providing voluntary, universally accessible, high-quality early education and care programs and services for preschool-aged children in the commonwealth. The program shall be designed to meet and enhance the preschool-aged child's ability to make age appropriate progress in the development of cognitive, linguistic, social, emotional and physical capacities and school readiness based on curriculum frameworks.

(b) The Massachusetts universal pre-kindergarten program shall be delivered through a mixed system of providers and programs. Programs shall be sufficiently flexible to serve families with various work schedules. The department shall develop a method for funding the program, which may provide grants, or enter into contracts with any provider of early education and care, or entities coordinating or administering plans to provide high-quality, comprehensive services to children and their families within the local community. These providers may include, but are not limited to: public; private; non-profit and for-profit preschools; child care centers; nursery schools; preschools operating within public and private schools; Head Start programs; independent and system-affiliated family child care homes; and local early education and care councils. The department may provide vouchers to eligible households for the purpose of implementing the early education and care program. All providers shall demonstrate that they are willing and able to serve and integrate children of diverse abilities and special needs, diverse cultural and linguistic backgrounds and diverse economic circumstances.

(c) The department and board shall, in consultation with the department and board of elementary and secondary education, develop a joint policy on kindergarten transitions, which shall ensure smooth transitions between home, family day care, center-based preschool, and public preschool. The policy shall be research-based, and aligned with best practices. The policy shall recognize the sensitive nature of the process for children and families, shall be designed to ensure the ongoing participation of parents and family in the process, and shall maximize all opportunities to ensure smooth transitions during the year before entering kindergarten. The process shall include, as much as is practicable, the exposure of both children and families to the kindergarten environment early and regularly in the transition process. The department shall require every preschool program receiving funding from the commonwealth to develop a local transition plan consistent with the statewide policy plan.

(d) The department, in cooperation with the executive office of health and human services, shall, to the extent practicable, assure that the programs and services provided through the Massachusetts universal pre-kindergarten program are no less available in the aggregate to the children of disabled parents than to the children of non-disabled parents. The department of early education and care, with the approval of the board and in consultation with the state advisory committee on early education and care established in section 3A, shall study and present any additional recommendations on the programmatic, financing, and phase-in options for the development and universal implementation of the Massachusetts universal pre-kindergarten program. This study shall include an estimate of the need for full-day, full-year care that meets the needs of parents who work full-time and shall include the number of pre-school aged children in the commonwealth who may be at risk due to family poverty, TAFDC status, special needs, or other risk factors.

The department shall include its findings and recommendations, and any updates of its findings, in the annual report required under section 3.

Grants for Preschool Educational Programs, Chapter 105 Illinois Compiled Statutes 5, Article 2  
§ 2-3.71.

Sec. 2-3.71. Grants for preschool educational programs.

(a) Preschool program.

(1) The State Board of Education shall implement and administer a grant program under the provisions of this subsection which shall consist of grants to public school districts and other eligible entities, as defined by the State Board of Education, to conduct voluntary preschool educational programs for children ages 3 to 5 which include a parent education component. A public school district which receives grants under this subsection may subcontract with other entities that are eligible to conduct a preschool educational program. These grants must be used to supplement, not supplant, funds received from any other source.

(2) (Blank).

(3) Any teacher of preschool children in the program authorized by this subsection shall hold an early childhood teaching certificate.

(4) (Blank).

(4.5) The State Board of Education shall provide the primary source of funding through appropriations for the program. Such funds shall be distributed to achieve a goal of "Preschool for All Children" for the benefit of all children whose families choose to participate in the program. Based on available appropriations, newly funded programs shall be selected through a process giving first priority to qualified programs serving primarily at-risk children and second priority to qualified programs serving primarily children with a family income of less than 4 times the poverty guidelines updated periodically in the Federal Register by the U.S. Department of Health and Human Services under the authority of 42 U.S.C. 9902(2). For purposes of this paragraph (4.5), at-risk children are those who because of their home and community environment are subject to such language, cultural, economic and like disadvantages to cause them to have been determined as a result of screening procedures to be at risk of academic failure. Such screening procedures shall be based on criteria established by the State Board of Education.

Except as otherwise provided in this paragraph (4.5), grantees under the program must enter into a memorandum of understanding with the appropriate local Head Start agency. This memorandum must be entered into no later than 3 months after the award of a grantee's grant under the program, except that, in the case of the 2009-2010 program year, the memorandum must be entered into no later than the deadline set by the State Board of Education for applications to participate in the program in fiscal year 2011, and must address collaboration between the grantee's program and the local Head Start agency on certain issues, which shall include without limitation the following: (A) educational activities, curricular objectives, and instruction; (B) public information dissemination and access to programs for families contacting programs; (C) service areas; (D) selection priorities for eligible children to be served by programs; (E) maximizing the impact of federal and State funding to benefit young children; (F) staff training, including opportunities for joint staff training; (G) technical assistance; (H) communication and parent outreach for smooth transitions to kindergarten; (I) provision and use of facilities,

transportation, and other program elements; (J) facilitating each program's fulfillment of its statutory and regulatory requirements; (K) improving local planning and collaboration; and (L) providing comprehensive services for the neediest Illinois children and families. If the appropriate local Head Start agency is unable or unwilling to enter into a memorandum of understanding as required under this paragraph (4.5), the memorandum of understanding requirement shall not apply and the grantee under the program must notify the State Board of Education in writing of the Head Start agency's inability or unwillingness. The State Board of Education shall compile all such written notices and make them available to the public.

(5) The State Board of Education shall develop and provide evaluation tools, including tests, that school districts and other eligible entities may use to evaluate children for school readiness prior to age 5. The State Board of Education shall require school districts and other eligible entities to obtain consent from the parents or guardians of children before any evaluations are conducted. The State Board of Education shall encourage local school districts and other eligible entities to evaluate the population of preschool children in their communities and provide preschool programs, pursuant to this subsection, where appropriate.

(6) The State Board of Education shall report to the General Assembly by November 1, 2010 and every 3 years thereafter on the results and progress of students who were enrolled in preschool educational programs, including an assessment of which programs have been most successful in promoting academic excellence and alleviating academic failure. The State Board of Education shall assess the academic progress of all students who have been enrolled in preschool educational programs.

On or before November 1 of each fiscal year in which the General Assembly provides funding for new programs under paragraph (4.5) of this Section, the State Board of Education shall report to the General Assembly on what percentage of new funding was provided to programs serving primarily at-risk children, what percentage of new funding was provided to programs serving primarily children with a family income of less than 4 times the federal poverty level, and what percentage of new funding was provided to other programs.

(b) (Blank).

(Source: P.A. 95-724, eff. 6-30-08; 96-119, eff. 8-4-09; 96-944, eff. 6-25-10; 96-948, eff. 6-25-10.)

Statewide Preschool Program for Four-year-Old-Children, Iowa Code Chapter 256c.1 Iowa, Chapter 256c. (2007).

256C.1 DEFINITIONS.

As used in this chapter:

1. *"Approved local program"* means a school district's program for four-year-old children approved by the department of education to provide high quality preschool instruction.
2. *"Department"* means the department of education.
3. *"Director"* means the director of the department of education.
4. *"Preschool program"* means the statewide preschool program for four-year-old children created in accordance with this chapter.
5. *"School district approved to participate in the preschool program"* means a school district that meets the school district requirements under section 256C.3 and has been approved by the department to participate in the preschool program.
6. *"State board"* means the state board of education.

&nbsb>Section History: Recent Form  
2007 Acts, ch 148, §1

256C.2 STATEWIDE PRESCHOOL PROGRAM FOR FOUR-YEAR-OLD  
CHILDREN -- PURPOSE.

1. A statewide preschool program for four-year-old children is established. The purpose of the preschool program is to provide an opportunity for all young children in the state to enter school ready to learn by expanding voluntary access to quality preschool curricula for all children who are four years old.
2. The state board shall adopt rules in accordance with chapter 17A as necessary to implement the preschool program as provided in this chapter.

Section History: Recent Form  
2007 Acts, ch 148, §2

256C.3 PRESCHOOL PROGRAM REQUIREMENTS.

1. *Eligible children.* A child who is a resident of Iowa and is four years of age on or before September 15 of a school year shall be eligible to enroll in the preschool program under this chapter. If space and funding are available, a school district approved to participate in the preschool program may enroll a younger or older child in the preschool program; however, the child shall not be counted for state funding purposes.
2. *Teacher requirements.*
  - a. An individual serving as a teacher in the preschool program must meet all of the following qualifications: (1) The individual is either employed by or under contract with the school district implementing the program. (2) The individual is appropriately licensed under chapter 272 and meets requirements under chapter 284. (3) The individual possesses a bachelor's or graduate degree from an accredited college or university with a major in early childhood education or other appropriate major identified in rule by the department.
  - b. A teacher in the preschool program shall collaborate with other agencies, organizations, and boards in the community to further the program's capacity to meet the diverse needs of the children taught by the teacher and the families of the children, such as needs for early care, health, and human services. In addition, a teacher in the preschool program shall work to

maintain relationships with each child's family in order to enhance the child's development in all settings by collaborating with providers of parent education and family support opportunities.

3. *Program requirements.* The state board shall adopt rules to further define the following preschool program requirements which shall be used to determine whether or not a local program implemented by a school district approved to implement the preschool program qualifies as an approved local program:

- a. Maximum and minimum teacher-to-child ratios and class sizes.
- b. Applicable state and federal program standards.
- c. Student learning standards.
- d. Provisions for the integration of children from other state and federally funded preschools.
- e. Collaboration with participating families, early care providers, and community partners including but not limited to community empowerment area boards, head start programs, shared visions and other programs provided under the auspices of the child development coordinating council, licensed child care centers, registered child development homes, area education agencies, child care resource and referral services provided under section 237A.26, early childhood special education programs, services funded by Title I of the federal Elementary and Secondary Education Act of 1965, and family support programs.
- f. A minimum of ten hours per week of instruction delivered on the skills and knowledge included in the student learning standards developed for the preschool program.
- g. Parental involvement in the local program.
- h. Provision for ensuring that children receiving care from other child care arrangements can participate in the preschool program with minimal disruption due to transportation and movement from one site to another.

4. *School district requirements.* The state board shall adopt rules to further define the following requirements of school districts implementing the preschool program:

a. Methods of demonstrating community readiness to implement high-quality instruction in a local program shall be identified. The potential provider shall submit a collaborative program proposal that demonstrates the involvement of multiple community stakeholders including but not limited to, and only as applicable, parents, the school district, accredited nonpublic schools and faith-based representatives, the area education agency, the community empowerment area board, representatives of business, head start programs, shared visions and other programs provided under the auspices of the child development coordinating council, center-based and home-based providers of child care services, human services, public health, and economic development programs. The methods may include but are not limited to a school district providing evidence of a public hearing on the proposed programming and written documentation of collaboration agreements between the school district, existing community providers, and other community stakeholders addressing operational procedures and other critical measures.

b. Subject to implementation of chapter 28E agreements between a school district and community-based providers of services to four-year-old children, a four-year-old child who is enrolled in a child care center or child development home licensed or registered under chapter 237A, or in an existing public or private preschool program, shall be eligible for services provided by the school district's local preschool program.

c. A school district shall participate in data collection and performance measurement processes and reporting as defined by rule.

*d.* Professional development for school district preschool teachers shall be addressed in the school district's professional development plan implemented in accordance with section 284.6.

*5. Department requirements.*

*a.* The department shall implement an application and selection process for school district participation in the preschool program that includes but is not limited to the enrollment requirements provided under section 256C.4.

*b.* The department shall track the progress of students served by a school district preschool program and the students' performance in elementary and secondary education.

*c.* The department shall implement procedures to monitor the quality of the programming provided under the preschool program.

*d.* The state board, in collaboration with the department, shall ensure that the administrative rules adopted to support the preschool program emphasize that children's access to the program is voluntary, that the preschool foundation aid provided to a school district is provided based upon the enrollment of eligible students in the school district's local program regardless of whether an eligible student is a resident of the school district, and that agreements entered into by a school district for the provision of programming in settings other than the school district's facilities are between the school district and the private provider.

Section History: Recent Form

2007 Acts, ch 148, §3; 2007 Acts, ch 215, §100; 2008 Acts, ch 1032, § 42; 2008 Acts, ch 1181, § 67, 74

Referred to in § 256C.1

Footnotes

Legislative intent that statewide early childhood professional development system be designed to support statewide preschool program for four-year-old children; 2008 Acts, ch 1181, § 73

#### 256C.4 FUNDING PROVISIONS -- ENROLLMENT.

*1. General.*

*a.* State funding provided under the preschool program shall be based upon the enrollment of eligible students in the preschool programming provided by a school district approved to participate in the preschool program.

*b.* A school district approved to participate in the preschool program may authorize expenditures for the district's preschool programming from any of the revenue sources available to the district from the sources listed in chapter 298A, provided the expenditures are within the uses permitted for the revenue source. In addition, the use of the revenue source for preschool or prekindergarten programming must have been approved prior to any expenditure from the revenue source for the district's approved local program.

*c.* Funding provided under the preschool program is intended to supplement, not supplant, existing public funding for preschool programming.

*d.* Preschool foundation aid funding shall not be commingled with the other state aid payments made under section 257.16 to a school district and shall be accounted for by the local school district separately from the other state aid payments. Preschool foundation aid payments made to school districts are miscellaneous income for purposes of chapter 257. A school district shall maintain a separate listing within its budget for preschool foundation aid payments received and expenditures made. A school district shall certify to the department of education that preschool foundation aid funding received by the school district was used to supplement, not supplant,

moneys otherwise received and used by the school district for preschool programming.

*e.* Preschool foundation aid funding shall not be used for the costs of constructing a facility in connection with an approved local program.

*f.* The receipt of funding by a school district for the purposes of this chapter, the need for additional funding for the purposes of this chapter, or the enrollment count of eligible students under this chapter shall not be considered to be unusual circumstances, create an unusual need for additional funds, or qualify under any other circumstances that may be used by the school budget review committee to grant supplemental aid to or establish modified allowable growth for a school district under section 257.31.

2. *Eligible student enrollment.*

*a.* To be included as an eligible student in the enrollment count of the preschool programming provided by a school district approved to participate in the preschool program, a child must be four years of age by September 15 in the base year and attending the school district's approved local program.

*b.* The enrollment count of eligible students shall not include a child who is included in the enrollment count determined under section 257.6 or a child who is served by a program already receiving state or federal funds for the purpose of the provision of four-year-old preschool programming while the child is being served by the program. Such preschool programming includes but is not limited to child development assistance programs provided under chapter 256A, special education programs provided under section 256B.9, school ready children grant programs and other programs provided under chapter 28, and federal head start programs and the services funded by Title I of the federal Elementary and Secondary Education Act of 1965.

Section History: Recent Form

2007 Acts, ch 148, §4; 2008 Acts, ch 1181, §68, 74

Referred to in § 256C.3, 256C.5

256C.5 FUNDING FORMULA.

1. *Definitions.* For the purposes of this section and section 256C.4:

*a.* "*Base year*", "*budget year*", "*regular program state cost per pupil*", and "*school district*" mean the same as defined or described in chapter 257.

*b.* "*Eligible student*" means a child who meets eligibility requirements under section 256C.4.

*c.* "*Preschool budget enrollment*" means the figure that is equal to sixty percent of the actual enrollment of eligible students in the preschool programming provided by a school district approved to participate in the preschool program on October 1 of the base year, or the first Monday in October if October 1 falls on a Saturday or Sunday.

*d.* "*Preschool foundation aid*" means the product of the regular program state cost per pupil for the budget year multiplied by the school district's preschool budget enrollment.

2. *Preschool foundation aid district amount.*

*a.* For the initial school year for which a school district approved to participate in the preschool program receives that approval and implements the preschool program, the funding for the preschool foundation aid payable to that school district shall be paid from the appropriation made for that school year in section 256C.6 or in another appropriation made for purposes of this chapter. For that school year, the preschool foundation aid payable to the school district is the product of the regular program state cost per pupil for the school year multiplied by sixty percent of the school district's eligible student enrollment on the date in the school year determined by rule.

b. For budget years subsequent to the initial school year for which a school district approved to participate in the preschool program receives that initial approval and implements the preschool program, the funding for the preschool foundation aid payable to that school district shall be paid from the appropriation made in section 257.16. Continuation of a school district's participation in the preschool program for a second or subsequent budget year is subject to the approval of the department based upon the school district's compliance with accountability provisions and the department's on-site review of the school district's implementation of the preschool program.

3. *Aid payments.* Preschool foundation aid shall be paid as part of the state aid payments made to school districts in accordance with section 257.16.

4. *Administration and oversight.* Except as otherwise provided by law for a fiscal year, of the amount appropriated for that fiscal year for payment of preschool foundation aid statewide, the department may use an amount sufficient to fund up to three full-time equivalent positions which shall be in addition to the number of positions authorized for the fiscal year, as necessary to provide administration and oversight of the preschool program.

Section History: Recent Form

2007 Acts, ch 148, §5; 2008 Acts, ch 1181, §69, 74

#### 256C.6 PHASE-IN -- APPROPRIATIONS.

1. *Phase-in.* For the initial fiscal year in which a school district participates in the preschool program pursuant to an appropriation provided in subsection 2, the department shall apply a modified set of the requirements of the provisions of this chapter relating to preschool program implementation, preschool enrollment reporting, and distribution of funding as necessary to begin the distribution in that fiscal year and additional program implementation in the next fiscal year.

2. *Appropriations for initial years.*

a. There is appropriated from the general fund of the state to the department of education for the designated fiscal years the following amounts, or so much thereof as is necessary, to be used for the initial year preschool foundation aid payments to school districts approved to participate in the preschool program and administrative costs: (1) For the fiscal year beginning July 1, 2008, and ending June 30, 2009, fifteen million dollars. (2) For the fiscal year beginning July 1, 2009, and ending June 30, 2010, fifteen million dollars. (3) For the fiscal year beginning July 1, 2010, and ending June 30, 2011, sixteen million one hundred sixty-two thousand five hundred dollars.

b. Notwithstanding section 8.33, moneys appropriated in this subsection that remain unencumbered or unobligated at the close of the fiscal year shall not revert but shall remain available for expenditure for the purposes designated until the close of the succeeding fiscal year.

3. *Insufficient funding.* For the fiscal years in the period beginning July 1, 2007, and ending June 30, 2011, if the number of requests from school districts for initial participation in the preschool program exceeds the funding made available for the preschool program, the department shall utilize all of the following selection criteria in selecting the school districts that will be approved to participate in the preschool program:

a. Priority shall be given to school districts that do not have existing preschool programming within the school district boundaries.

b. Priority shall be given to school districts that have a high percentage of children in poverty

and such children shall receive first priority for the programs.

*c.* Consideration shall be given to the size of school districts in large, medium, and small categories in order for there to be equitable statewide distribution of preschool program services.

*d.* Consideration shall be given to school districts with established, high-quality, community partnerships for the delivery of preschool programming that are seeking to expand access.

4. *Repeal.* This section is repealed July 1, 2011.

Section History: Recent Form

2007 Acts, ch 148, §6; 2008 Acts, ch 1181, §70, 71, 74

Referred to in § 256C.5

An Act Relating to Providing Access to Publicly Funded Prekindergarten Education (H. 270),  
Sec. 1. 16 V.S.A. § 829.

No. 166. An act relating to providing access to publicly funded prekindergarten education.  
(H.270)

It is hereby enacted by the General Assembly of the State of Vermont:

Sec. 1. 16 V.S.A. § 829 is amended to read:

§ 829. PREKINDERGARTEN EDUCATION; RULES

(a) Definitions. As used in this section:

(1) “Prekindergarten child” means a child who, as of the date established by the district of residence for kindergarten eligibility, is three or four years of age or is five years of age but is not yet enrolled in kindergarten.

(2) “Prekindergarten education” means services designed to provide to prekindergarten children developmentally appropriate early development and learning experiences based on Vermont’s early learning standards.

(3) “Prequalified private provider” means a private provider of prekindergarten education that is qualified pursuant to subsection (c) of this section.

(b) Access to publicly funded prekindergarten education.

(1) No fewer than ten hours per week of publicly funded prekindergarten education shall be available for 35 weeks annually to each prekindergarten child whom a parent or guardian wishes to enroll in an available, prequalified program operated by a public school or a private provider.

(2) If a parent or guardian chooses to enroll a prekindergarten child in an available, prequalified program, then, pursuant to the parent or guardian’s choice, the school district of residence shall:

(A) pay tuition pursuant to subsections (d) and (h) of this section upon the request of the parent or guardian to:

(i) a prequalified private provider; or

(ii) a public school located outside the district that operates a prekindergarten program that has been prequalified pursuant to subsection (c) of this section; or

(B) enroll the child in the prekindergarten education program that it operates.

(3) If requested by the parent or guardian of a prekindergarten child, the school district of residence shall pay tuition to a prequalified program operated by a private provider or a public school in another district even if the district of residence operates a prekindergarten education program.

(4) If the supply of prequalified private and public providers is insufficient to meet the demand for publicly funded prekindergarten education in any region of the State, nothing in this section shall be construed to require a district to begin or expand a program to satisfy that demand; but rather, in collaboration with the Agencies of Education and of Human Services, the local Building Bright Futures Council shall meet with school districts and private providers in the region to develop a regional plan to expand capacity.

(c) Prequalification. Pursuant to rules jointly developed and overseen by the Secretaries of Education and of Human Services and adopted by the State Board pursuant to 3 V.S.A. chapter 25, the Agencies jointly may determine that a private or public provider of prekindergarten education is qualified for purposes of this section and include the provider in a publicly accessible database of prequalified providers. At a minimum, the rules shall define the process

by which a provider applies for and maintains prequalification status, shall identify the minimum quality standards for prequalification, and shall include the following requirements:

(1) A program of prekindergarten education, whether provided by a school district or a private provider, shall have received:

(A) National Association for the Education of Young Children (NAEYC) accreditation; or

(B) at least four stars in the Department for Children and Families STARS system with at least two points in each of the five arenas; or

(C) three stars in the STARS system if the provider has developed a plan, approved by the Commissioner for Children and Families and the Secretary of Education, to achieve four or more stars in no more than two years with at least two points in each of the five arenas, and the provider has met intermediate milestones.

(2) A licensed provider shall employ or contract for the services of at least one teacher who is licensed and endorsed in early childhood education or in early childhood special education under chapter 51 of this title.

(3) A registered home provider that is not licensed and endorsed in early childhood education or early childhood special education shall receive regular, active supervision and training from a teacher who is licensed and endorsed in early childhood education or in early childhood special education under chapter 51 of this title.

(d) Tuition, budgets, and average daily membership.

(1) On behalf of a resident prekindergarten child, a district shall pay tuition for prekindergarten education for ten hours per week for 35 weeks annually to a prequalified private provider or to a public school outside the district that is prequalified pursuant to subsection (c) of this section; provided, however, that the district shall pay tuition for weeks that are within the district's academic year. Tuition paid under this section shall be at a statewide rate, which may be adjusted regionally, that is established annually through a process jointly developed and implemented by the Agencies of Education and of Human Services. A district shall pay tuition upon:

(A) receiving notice from the child's parent or guardian that the child is or will be admitted to the prekindergarten education program operated by the prequalified private provider or the other district; and

(B) concurrent enrollment of the prekindergarten child in the district of residence for purposes of budgeting and determining average daily membership.

(2) In addition to any direct costs of operating a prekindergarten education program, a district of residence shall include anticipated tuition payments and any administrative, quality assurance, quality improvement, transition planning, or other prekindergarten-related costs in its annual budget presented to the voters.

(3) Pursuant to subdivision 4001(1)(C) of this title, the district of residence may include within its average daily membership any prekindergarten child for whom it has provided prekindergarten education or on whose behalf it has paid tuition pursuant to this section.

(4) A prequalified private provider may receive additional payment directly from the parent or guardian only for prekindergarten education in excess of the hours paid for by the district pursuant to this section or for child care services, or both. The provider is not bound by the statewide rate established in this subsection when determining the rates it will charge the parent or guardian.

(e) Rules. The commissioner of education and the commissioner for children and families Secretary of Education and the Commissioner for Children and Families shall jointly develop

and agree to rules and present them to the state board of education State Board for adoption under 3 V.S.A. chapter 25 as follows:

(1) To ensure that, before a school district begins or expands a prekindergarten education program that intends to enroll students who are included in its average daily membership, the district engage the community in a collaborative process that includes an assessment of the need for the program in the community and an inventory of the existing service providers; provided, however, if a district needs to expand a prekindergarten education program in order to satisfy federal law relating to the ratio of special needs children to children without special needs and if the law cannot be satisfied by any one or more qualified service providers with which the district may already contract, then the district may expand an existing school-based program without engaging in a community needs assessment. To permit private providers that are not prequalified pursuant to subsection (c) of this section to create new or continue existing partnerships with school districts through which the school district provides supports that enable the provider to fulfill the requirements of subdivision (c)(2) or (3), and through which the district may or may not make in-kind payments as a component of the statewide tuition established under this section.

(2) To ensure that, if a school district begins or expands a prekindergarten education program that intends to include any of the students in its average daily membership, the district shall use existing qualified service providers to the extent that existing qualified service providers have the capacity to meet the district's needs effectively and efficiently. To authorize a district to begin or expand a school-based prekindergarten education program only upon prior approval obtained through a process jointly overseen by the Secretaries of Education and of Human Services, which shall be based upon analysis of the number of prekindergarten children residing in the district and the availability of enrollment opportunities with prequalified private providers in the region. Where the data are not clear or there are other complex considerations, the Secretaries may choose to conduct a community needs assessment.

(3) To require that the school district provides opportunities for effective parental participation in the prekindergarten education program.

(4) To establish a process by which:

(A) a parent or guardian residing in the district or a provider, or both, may request a school district to enter into a contract with a provider located in or outside the district notifies the district that the prekindergarten child is or will be admitted to a prekindergarten education program not operated by the district and concurrently enrolls the child in the district pursuant to subdivision (d)(1) of this section;

(B) a district:

(i) pays tuition pursuant to a schedule that does not inhibit the ability of a parent or guardian to enroll a prekindergarten child in a prekindergarten education program or the ability of a prequalified private provider to maintain financial stability; and

(ii) enters into an agreement with any provider to which it will pay tuition regarding quality assurance, transition, and any other matters; and

(C) a provider that has received tuition payments under this section on behalf of a prekindergarten child notifies a district that the child is no longer enrolled.

(5) To identify the services and other items for which state funds may be expended when prekindergarten children are counted for purposes of average daily membership, such as tuition reduction, quality improvements, or professional development for school staff or private

providers. To establish a process to calculate an annual statewide tuition rate that is based upon the actual cost of delivering ten hours per week of prekindergarten education that meets all established quality standards and to allow for regional adjustments to the rate.

(6) To ensure transparency and accountability by requiring private providers under contract with a school districts to report costs for prekindergarten programs to the school district and by requiring school districts to report these costs to the commissioner of education. [Repealed.]

(7) To require school districts a district to include identifiable costs for prekindergarten programs and essential early education services in their its annual budgets and reports to the community.

(8) To require school districts a district to report to the departments their Agency of Education annual expenditures made in support of prekindergarten care and education, with distinct figures provided for expenditures made from the general fund General Fund, from the education fund Education Fund, and from all other sources, which shall be specified.

(9) To provide an appeal administrative process for:

(A) a parent, guardian, or provider to challenge an action of the a school district or the State when the appellant complainant believes that the district or State is in violation of state statute or rules regarding prekindergarten education; and

(B) a school district to challenge an action of a provider or the State when the district believes that the provider or the State is in violation of state statute or rules regarding prekindergarten education.

(10) To establish the minimum quality standards necessary for a district to include prekindergarten children within its average daily membership. At a minimum, the standards shall include the following requirements:

(A) The prekindergarten education program, whether offered by or through the district, shall have received:

(i) National Association for the Education of Young Children (NAEYC) accreditation; or

(ii) At least four stars in the department for children and families STARS system with at least two points in each of the five arenas; or

(iii) Three stars in the STARS system if the provider has developed a plan, approved by the commissioner for children and families and the commissioner of education, to achieve four or more stars within three years with at least two points in each of the five arenas, and the provider has met intermediate milestones; and

(B) A licensed center shall employ or contract for the services of at least one teacher who is licensed and endorsed in early childhood education or in early childhood special education under chapter 51 of this title; and

(C) A registered home shall receive regular, active supervision and training from a teacher who is licensed and endorsed in early childhood education or in early childhood special education under chapter 51 of this title. To establish a system by which the Agency of Education and Department for Children and Families shall jointly monitor and evaluate prekindergarten education programs to promote optimal outcomes for children and to collect data that will inform future decisions. The Agency and Department shall be required to report annually to the General Assembly in January. At a minimum, the system shall monitor and evaluate:

(A) programmatic details, including the number of children served, the number of private and public programs operated, and the public financial investment made to ensure access to quality prekindergarten education;

(B) the quality of public and private prekindergarten education programs and efforts to ensure continuous quality improvements through mentoring, training, technical assistance, and otherwise; and

(C) the outcomes for children, including school readiness and proficiency in numeracy and literacy.

(11) To establish a process for documenting the progress of children enrolled in prekindergarten education programs and to require public and private providers to use the process to:

(A) help individualize instruction and improve program practice; and

(B) collect and report child progress data to the commissioner of education Secretary of Education on an annual basis.

(f) Other provisions of law. Section 836 of this title shall not apply to this section.

(g) Limitations. Nothing in this section shall be construed to permit or require payment of public funds to a private provider of prekindergarten education in violation of Chapter I, Article 3 of the Vermont Constitution or in violation of the Establishment Clause of the U.S. Constitution.

(h) Geographic limitations.

(1) Notwithstanding the requirement that a district pay tuition to any prequalified public or private provider in the State, a school board may choose to limit the geographic boundaries within which the district shall pay tuition by paying tuition solely to those prequalified providers in which parents and guardians choose to enroll resident prekindergarten children that are located within the district's "prekindergarten region" as determined in subdivision (2) of this subsection.

(2) For purposes of this subsection, upon application from the school board, a district's prekindergarten region shall be determined jointly by the Agencies of Education and of Human Services in consultation with the school board, private providers of prekindergarten education, parents and guardians of prekindergarten children, and other interested parties pursuant to a process adopted by rule under subsection (e) of this section. A prekindergarten region:

(A) shall not be smaller than the geographic boundaries of the school district;

(B) shall be based in part upon the estimated number of prekindergarten children residing in the district and in surrounding districts, the availability of prequalified private and public providers of prekindergarten education, commuting patterns, and other region-specific criteria; and

(C) shall be designed to support existing partnerships between the school district and private providers of prekindergarten education.

(3) If a school board chooses to pay tuition to providers solely within its prekindergarten region, and if a resident prekindergarten child is unable to access publicly funded prekindergarten education within that region, then the child's parent or guardian may request and in its discretion the district may pay

tuition at the statewide rate for a prekindergarten education program operated by a prequalified provider located outside the prekindergarten region.

(4) Except for the narrow exception permitting a school board to limit geographic boundaries under subdivision (1) of this subsection, all other provisions of this section and related rules shall continue to apply.

## Sec. 2. PREKINDERGARTEN EDUCATION; CALCULATION OF EQUALIZED PUPILS; EXCLUSION FROM EDUCATION SPENDING

If a school district did not provide or pay for prekindergarten education

pursuant to 16 V.S.A. § 829 in fiscal year 2015, then:

(1) for purposes of determining the equalized pupil count for the fiscal year 2016 budget, the long-term membership of prekindergarten children shall be the number of prekindergarten children for whom the district anticipates it will provide prekindergarten education or pay tuition, or both, in fiscal year 2016; and

(2) for purposes of determining the equalized pupil count for the fiscal year 2017 budget, the long-term membership of prekindergarten children shall be the total number of prekindergarten children for whom the district provided prekindergarten education or paid tuition, or both, in fiscal year 2016, adjusted to reflect the difference between the estimated and actual count for that fiscal year.

### Sec. 3. QUALITY STANDARDS

(a) The Agencies of Education and of Human Services shall review existing quality standards for prekindergarten education programs and may initiate rulemaking under 3 V.S.A. chapter 25 to require higher standards of quality; provided, however, that no new standards shall take effect earlier than July 1, 2016. Changes to the quality standards shall be designed to ensure that programs are based on intentional, evidence-based practices that create a developmentally appropriate environment and support the delivery of an engaging program that supports the social, emotional, intellectual, language, literacy, and physical development of prekindergarten children.

(b) In January of the 2016, 2017, and 2018 legislative sessions, the Agencies shall report to the House and Senate Committees on Education and on Appropriations, the House Committee on Human Services, and the Senate Committee on Health and Welfare regarding the quality of prekindergarten education in the State.

### Sec. 3a. REPORT ON ENROLLMENT AND ACCESS

The Agencies of Education and of Human Services and the Building Bright Futures Council shall monitor and evaluate access to and enrollment in prekindergarten education programs under Sec. 1 of this act. On or before January 1, 2018, they shall report to the House and Senate Committees on Education and on Appropriations, the House Committee on Ways and Means, and the Senate Committee on Finance regarding their evaluation, conclusions, and any recommendations for amendments to statute or related rule.

### Sec. 3b. PREKINDERGARTEN REGIONS; PROCESS AND CRITERIA

The Agencies of Education and of Human Services, in consultation with the Vermont Superintendents Association, the Vermont School Boards Association, the Vermont Principals' Association, the Vermont-NEA, and the Building Bright Futures Council created in 33 V.S.A. chapter 46, shall develop a detailed proposal outlining the process and criteria by which the Agencies will determine the prekindergarten region of a school district if requested to do so pursuant to Sec. 1, 16 V.S.A. § 829(h)(2), of this act. The Agencies shall present the proposal to the House and Senate Committees on Education on or before January 15, 2015. The Agencies shall also present any recommendations for amendments to statute, including repeal of or amendments to subsection (h).

### Sec. 4. CONSTITUTIONALITY

On or before July 1, 2014, the Secretary of Education shall identify the private prekindergarten education programs to which school districts are paying tuition on behalf of resident prekindergarten children, determine the extent to which any program provides religious prekindergarten education, and establish the steps the Agency will take to ensure that

public funds are not expended in violation of Chapter I, Article 3 of the Vermont Constitution and the Vermont Supreme Court's decision in Chittenden Town School District v. Vermont Department of Education, 169 Vt. 310 (1999) or in violation of the Establishment Clause of the U.S. Constitution.

Sec. 5. EFFECTIVE DATE

This act shall take effect on passage and shall apply to enrollments on July 1, 2015 and after.

Date Governor signed bill: May 28, 2014