Designing and Developing the Pennsylvania Early Care and Education Career Pathway System

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Designing and Developing the Pennsylvania Early Care and Education Career Pathway System

Doctor of Education Leadership (Ed.L.D.)
Capstone

Submitted by
Ola J. Friday

To the Harvard Graduate School of Education
in partial fulfillment of the requirements for the degree of Doctor of Education Leadership.

April 2017
DEDICATION

To my mother, Marjorie Angela Friday, for being my all, including the epitome of the woman I aspire to be.

To my late father, Brian Lester Friday, for being an example of a fearless inquisitor and teaching me that true love comes in many forms.

“The harder the battle the sweet of Jah victory.” ~ Robert Nestor Marley
ACKNOWLEDGEMENTS

This Capstone would not have been possible without the support of the staff at the Pennsylvania Office of Child Development and Early Learning. Thank you for letting me into your world and entrusting me with this work. You dispelled the notion that government is anything but bold and aspirational. Your passion, tenacity and willingness to do new things, especially what is best for children and families, inspired me every day. In particular, I would like to thank Tracey Campanini for her support. Your wealth of knowledge and experience helped to steer me, tirelessly, in the right direction.

Thank you to my advisor, the incomparable S. Paul Reville, for reminding throughout this Capstone journey to, “Just tell the story, Ola!” and for the many other lessons I’ve learned from being under your tutelage. It has been an honor and a pleasure having you as an advisor and mentor.

Thank you to the brilliant Ebony Bridwell-Mitchell for keeping me honest in more ways than I can count. Your keen mind and commitment to this process have shaped this Capstone immensely.

My Ed.L.D. journey would not have been complete without the support and guidance of Robert Goodman. Your patient ear, sharp mind and kind soul have left imprints on my heart.

Thank you to the staff and professors at the Harvard Graduate School of Education. There are too many to name but you have all shaped me by your brilliance and excellence.

Lastly, thank you to my colleagues in the indomitable Cohort 5. You inspire me every day. My greatest honor in this journey was that I spent it with you.
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ABSTRACT

The early care and education (ECE) workforce plays a vital role in supporting the development of our youngest learners, and putting them on track for a lifetime of success. These critical practitioners work hard for little status or compensation. The profession is grappling with advancing the skills and competencies of practitioners already in the field and lifting the barriers to entry for those new to the profession. This complex work requires innovative strategies, new policies, and comprehensive supports, particularly in light of the low compensation in this sector. State government organizations, such as the Pennsylvania Office of Child Development and Early Learning (OCDEL), are well-versed in the challenges and rewards of this important work. OCDEL is committed to supporting the advancement of the early care and education workforce through policies, procedures, regulations, programs, and funding.

During my residency, I led the Career Pathways Work Group in revising the Early Learning Keys to Quality Career Lattice. I used this discrete charge as an entry to engage the team in a broader strategic planning effort. I employed the career pathways approach and its focus on career pathway systems to guide my work and the broader strategic planning efforts. I engaged in a three-part approach where I: (1) used vision-setting to establish a larger goal for the team’s efforts; (2) facilitated a shift in the team’s focus from narrow—the redesign of the career lattice—to broad—career pathways system development and (3) guided the team’s initial engagement in the systems design and development processes.

I achieved these outcomes because I: (1) managed the complexity of the endeavor by scaffolding the team’s engagement and grounding its work in a vision; (2) calibrated my leadership moves to the learning needs of the team; (3) created short-term wins to maintain momentum and foster commitment to the process; and (4) engaged my authorizers to build legitimacy and support.
INTRODUCTION

THE RESIDENCY

In the summer of 2016, I began a 10-month residency as part of the Doctor of Education Leadership program at the Harvard Graduate School of Education. I chose my residency site, the Pennsylvania Office of Child Development and Early Learning (OCDEL) because of its focus on early care and education policy and program administration, and because it is led by a dynamic woman new to state government. Although I had spent much of my early professional career working in partnership with state government, I did not have direct experience working in a state government agency. I wanted to learn more about the critical role of the state government in early care and education, and this residency afforded me that learning. I was particularly interested in working in Pennsylvania because of its exemplar reputation as one of the first state agencies to combine all early care and education functions under one governmental entity. As an outsider, I had assumed that this structural organization allowed for the provision of more effective and efficient services with fewer bureaucratic hurdles. As I entered the residency, I sought to learn whether my assumptions were true.

THE SECTOR

Frederick Douglass once said, “It is easier to build strong children than to repair broken men.” The early care and education sector is in the business of building strong children. It does this through a variety of publicly and privately funded programs serving children from birth through age eight. Federally funded programs, such as Head Start and Early Head Start provide services for low-income children. Most states, and increasingly large school districts, fund preschool programs serving children age four and at times age three. In addition, a variety of privately funded programs, including nursery schools and private academic schools, provide
services. The funding source and the setting of services distinguishes programs. Family child care homes provide services in a provider’s home or home-like setting. Child care centers provide services in public or private buildings, including churches and schools. After-school programs provide recreational and education services in a variety of settings. A combination of funding sources may be used in a given program type.

Most child care programs are licensed to operate by a state entity that establishes program regulations and monitors the safety of the environments. Different settings such as home-based care and center-based child care have different regulations. Some states do not monitor the health and safety of license-exempt care such as special-education programs, recreational programs, or care provided by a family, friend or neighbor. Child care laws and regulations vary by state and represent a vast array of requirements, standards and expectations.

Child care regulations also establish the minimum staff qualifications for entry into the profession by articulating staff requirements. Some programs, such as Head Start and most state-funded preschools have their own staff requirements. There is little consensus in the sector about staff role titles, their functions and the requisite qualification requirements. There is a marked division between care and education, and this division is seen most clearly in staff qualification requirements and in compensation levels. The Bureau of Labor Statistics defines child care workers as those who “perform a variety of tasks, such as dressing, feeding, bathing, and overseeing play.” The typical entry-level education for these practitioners is a high school diploma or equivalent and the median annual salary is $20,320.1 Preschool teachers, “instruct preschool-aged children in activities designed to promote social, physical and intellectual

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growth needed for primary school.” The typical entry-level education for these practitioners is an associate’s degree and the median annual salary is $28,570.² Many child care workers would argue that they also promote the social, physical and intellectual growth of children and should be compensated accordingly.

THE ORGANIZATION

The Pennsylvania Office of Child Development and Early Learning is a dual deputate under the Department of Human Services (DHS) and the Pennsylvania Department of Education (PDE). OCDEL is comprised of four bureaus with a number of regional offices: the Bureau of Early Learning Services (BELS); the Bureau of Early Intervention Services; the Bureau of Certification Services and the Bureau of Subsidy Services. See Appendix A for the organizational chart. BELS runs a suite of programs and initiatives including the state-funded pre-kindergarten program, the state-funded Head Start Supplemental Program, the federally funded home visiting initiatives under the Maternal, Infant and Early Childhood Home Visiting (MIECHV) program, and program quality initiatives such as Keystone STARS. The Bureau of Certification Services oversees child care program licensing and monitors programs’ compliance with state laws and regulations. The Bureau of Early Intervention Services supervises federally funded early intervention services to infants, toddlers and children up to age five. The Bureau of Subsidy Services manages the state’s allotment of the federal Child Care and Development Block Grant including the provision of child care subsidy funds to low-income families. OCDEL implements its many services with an annual operating budget of approximately $1.5 billion.

OCDEL utilizes the services of two main business partners to deliver professional development support, the PA Key and the Early Intervention Technical Assistance (EITA). The PA Key provides a statewide program of integrated professional development supports and assessments for child care programs. The EITA provides statewide technical assistance and professional development to infant/toddler and preschool early intervention specialists to support their work with children with disabilities and their families.

In 2015, OCDEL’s leadership declared a new vision, mission and goals for the organization and articulated six priority initiatives to drive these. (See Appendix B for the vision/mission/goals/priorities document.) The six priorities were:

1) Integrating and Aligning OCDEL’s Services;
2) Building Capacity for High-Quality Early Learning Services;
3) Child Care Development Block Grant Reauthorization;
4) Reducing Expulsions/Suspension and Promoting Inclusion in Early Childhood;
5) Keystone STARS Re-visioning; and
6) Supporting the Early Childhood Education Workforce.

OCDEL’s new emphases aligned to the priorities of the new state administration under Governor Tom Wolf that stressed the importance of providing efficient government services including “schools that teach, jobs that pay, and government that works.” Altogether, the new vision, mission, goals and priority initiatives created an atmosphere of change, growth, excitement and ultimately uncertainty in the organization.

Of the six priority initiatives, two played the most significant role in my residency. Integrating and Aligning OCDEL Services or as I call it, the “Integration Initiative” sought to streamline and align the organization’s work streams and functions. The Integration Initiative

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3 Throughout this Capstone, I use “professional development” and “professional learning” interchangeably.

4 For more information on Governor Tom Wolf’s priorities see: [https://www.governor.pa.gov/priorities/](https://www.governor.pa.gov/priorities/)
aimed to reduce the administrative burdens on child care programs and enable families to more easily access needed programs by aligning: 1) internal processes; 2) data to be collected and 3) payment rules and practices. Under the Integration Initiative, a Workforce Work Group met to identify workforce challenges and ways in which OCDEL could provide better supports and services. The group recommended a revision of the existing career lattice to better articulate a clear pathway of professional progression for early care and education (ECE) practitioners.

The other initiative of primary focus for me during residency was the Keystone STARS Re-visioning. Keystone STARS is Pennsylvania’s quality rating and improvement system. This initiative seeks to improve the child care program quality by engaging child care practitioners in assessments of the learning environment and in improvement activities such as professional development. Child care programs in Keystone STARS are rated on a four-level scale, with increasing levels equating to higher levels of program quality. Incentives, such as grants and awards, support program participation. Keystone STARS began in 2006 and was being redesigned in 2016 to better meet the needs of the participants and to encourage broader participation.

Keystone STARS incorporates the Keys to Quality Career Lattice (See Appendix C) as part of the rating determination process. The career lattice depicts a progression of professional advancement and outlines lateral movement between job positions with similar qualification requirements. It is a means to assess staff qualifications and award points that inform the overall site rating. Programs receive a number of points for the percentage and type of staff they have at certain levels of the career lattice. The existing version of the Keys

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5 In this Capstone, I use “early care and education practitioner,” “ECE practitioner,” and “child care practitioner interchangeably.
to Quality Career Lattice has been in operation since 2006. Over time, participants in Keystone STARS expressed frustration with the career lattice and its inability to reflect their perceived true professional level. Staff were assigned to lower levels of the career lattice than they felt was appropriate. Consequently, programs received low ratings, which mitigated their access to additional resources and incentives. As providers expressed increased discontentment with the career lattice and its delineated pathways of progression, the Keystone STARS program responded with ad hoc policy adjustments, provisions and alternative pathways. This disjointed response resulted in an incoherent, misaligned system of career pathway programs, policies and supports. OCDEL leadership sought to revise the Keys to Quality Career Lattice prior to the launch of Keystone STARS Re-visioning.

In addition to the workforce development efforts under Keystone STARS, OCDEL was also engaged in a variety of workforce development efforts. Through the PA Key and EITA, OCDEL provides training and technical assistance to programs and staff, and Teacher Education and Compensation Helps (T.E.A.C.H.) Early Childhood Scholarships6 to support college attendance. OCDEL provides these services through the Bureau of Early Learning Services and its main professional development partner, the PA Key.

In August 2016, then-Deputy Secretary Michelle Figlar left the office, which resulted in a three-month period of transition until the appointment of a permanent new Deputy Secretary. Priority initiatives continued to progress during this time; however, the absence of leadership exacerbated the feelings of uncertainty about the future of the efforts. The Integration Initiative and Keystone STARS, which were outward-facing initiatives that required a great deal of stakeholder input, were accordingly more concerning. It was in this

6 T.E.A.C.H. Early Childhood® provides educational scholarships to early care professionals and those who perform specialized functions in the early care system. For more information see: http://www.childcareservices.org/ps/teach-nc/
organizational context of change and uncertainty that I entered the organization and began my strategic project.

My strategic project sought to capitalize on the state of the organization. I sensed that given the new priority initiatives, there was great opportunity for a strategic planning process of aligning OCDEL’s organizational goals to its vision for the ECE workforce, particularly around career advancement. I leveraged the confluence of energy of the Keystone STARS Revisioning and the Integration Initiative to engage OCDEL staff in a strategic planning effort. The career pathways approach and its emphasis on career pathways and career pathway systems development guided my efforts. The Keys to Quality Career Lattice redesign served as my entrée into this work.

This Capstone describes my experiences at OCDEL leading the Career Pathways Work Group to articulate a vision for the early care and education profession and then beginning the work to devise an organizational strategy to enact that vision. I engaged in a three-part approach where I: (1) used vision-setting to establish a larger goal for the team’s efforts; (2) facilitated a shift in the team’s focus from narrow—the redesign of the career lattice—to broad—career pathways system development and (3) guided the team’s initial engagement in the systems design and development processes. I achieved these outcomes because I: (1) managed the complexity of the endeavor by scaffolding the team’s engagement and grounding their work in a vision; (2) calibrated my leadership moves to the learning needs of the team; (3) created short-term wins to maintain momentum and foster commitment to the process; and (4) engaged my authorizers to build legitimacy and support.

I begin the Capstone with a Review of Knowledge for Action (RKA) to set the stage for my investigations into the world of career pathways and career pathways systems. I end the RKA with an initial argument or theory of action that guided my entry into the work. In
the subsequent Strategic Project section, I explore my actions during the strategic project, the results and the analysis of those outcomes in light of an evolved theory of action. Through the analysis, four leadership themes emerge that then ground my exploration of implications for myself as a leader, implications for OCDEL and broader implications for the early care and education sector.

**REVIEW OF KNOWLEDGE FOR ACTION (RKA)**

In this Review of Knowledge for Action (RKA), I explore the early care and education workforce context broadly. I then define the elements of the career pathways approach and explore career pathways system development in the labor industry and specific to the ECE sector. Then, to inform my leadership efforts given OCDEL’s context I explore leadership in an organizational environment of change and uncertainty. The following research question guided my investigation and informed my theory of action: How might I use the revision of an early care and education career lattice to facilitate a broader scope of work in the development of a statewide ECE career pathways system, within an organization experiencing change and uncertainty?

**PART I: THE EARLY CARE AND EDUCATION WORKFORCE**

In the United States today, approximately 1.3 million paid professionals care for and educate 12 million children (under the age of five) (Limardo, Hill, Stadd & Zimmer, 2016; Bureau of Labor Statistics, 2017). These ECE practitioners play a vital role in children’s development. Research shows that the interactions between the child and teacher in the early learning setting contributes greatly to the child’s development and eventual social, emotional, and academic outcomes (Early et al., 2006; Whitebook, Phillips & Howes, 2014). The quality
of the teacher is central to her ability to engage in effective interactions. Given the importance of the role of these individuals, developing their workforce skills is critical.

The existing quality—skills and training—of the ECE workforce varies depending on states’ requirements and program type. In most states, the barrier to entry to the profession is typically a high school diploma or its equivalent. Federally funded preschool programs, such as Head Start and state-funded preschool programs, have higher staff education requirements including a bachelor’s degree. In Pennsylvania, teachers in a typical child care program are only required to have a minimum of a high school diploma, while teachers in the publicly funded PreK Counts program must have a bachelor’s degree and teacher certification. These qualification disparities exist even though these practitioners might be doing the same work. At times, one child care program might have classrooms next to one another serving children of the same ages, yet led by teachers with markedly different credentials.

Despite the low qualification requirements, the educational attainment of child care practitioners is increasing. According to the National Survey of Early Care and Education (NSECE), “a majority (53%) of center-based and almost a third (30%) of home-based teachers and caregivers reported having college degrees—and almost a third reported BA or graduate/professional degrees” (2013, p. 4). Driving this push toward higher credentials is partly the explosion of preschools that require bachelor’s degrees, which are publicly funded by states and school districts. According to one estimation, the sector will need 100,000 preschool teachers with bachelor’s degrees within the next six years (Limardo, Sweeney & Taylor, 2016). In addition, early care and education practitioners are advocating for increased compensation given the importance of their work, and they recognize that having higher credentials will support that effort.
Early care and education practitioners experience a myriad of challenges in the process of obtaining higher credentials or “upskilling.” Many child care practitioners are non-traditional adult students who require significant academic, financial and personal supports. ECE practitioners lack time to pursue professional learning due to the long workdays with little release time during the day. This is a particular challenge for family home-based providers who work long hours and are frequently the only staff present in the home. Other challenges include: lack of funds to pay for professional learning; lack of availability of professional learning activities, particularly in rural and other resource-constrained areas; and lack of a professional community, especially in settings outside of school systems (Limardo, Hill, Stadd & Zimmer, 2016). Training that is offered is frequently ad hoc and not college credit-bearing, which makes it difficult for staff to amass credits toward a higher education degree.

Low wages contribute to a number of challenges in the ECE sector including, recruitment, retention and career advancement. Low wages discourage new entrants to the workforce if they have other options. Workforce pay also perpetuates high staff turnover among child care practitioners with higher credentials who do join the workforce but leave for higher-paying sectors (Whitebook, Phillips & Howes, 2014; Bradley, 2001). Low wages also disincentivize practitioners from pursuing higher credentials because there is no indication that they will earn more money to offset the cost. Approximately 46 percent of ECE practitioners receive public assistance (Limardo, Hill, Stadd & Zimmer, 2016). Consistently, ECE practitioners earn less than animal care workers and little more than fast food cooks (Whitebook, Phillips & Howes, 2014). ECE practitioners with a bachelor’s degree earn less than similarly educated workers in other professions (NSECE, 2013; Whitebook, Phillips &

According to the Oxford Dictionary to upskill is to teach (an employee) additional skills or (of an employee) learn additional skills. See: https://en.oxforddictionaries.com/definition/upskill
Howes, 2014). While education and training requirements have increased for early education teachers nationwide, workforce pay has not (NSECE, 2013).

In Pennsylvania, the Office of Child Development and Early Learning is the state agency responsible for the professional development of the ECE workforce and for establishing the career pathways. Even with the Keys to Quality Career Lattice, ECE practitioners experience many challenges in upskilling and career advancement. OCDEL has not articulated a clear career advancement route for its ECE workforce beyond merely stating the typically low entry requirements, nor has it clearly articulated its strategy for supporting professional advancement. In my strategic project was to lead a team at OCDEL through a process of redesigning the Keys to Quality Career Lattice and leveraging that opportunity to develop an aspirational pathway of career progression in the ECE field, articulating the needed strategies and supports to propel practitioners along the pathway.

PART II: AN EXPLORATION OF THE CAREER PATHWAYS APPROACH

The career pathway approach is a systems strategy that connects progressive levels of education, training, support services, and credentials for a specific occupation in a way that optimizes progress of individuals (CLASP, 2014). There is evidence from other industries that the career pathways approach is a viable way to prepare and upskill incumbent workers in an industry (Limardo, Hill, Stadd & Zimmer, 2016). The ECE field is increasingly recognizing the benefit of the career pathways approach and adopting it to establish a clear route for increased education and training to attain advanced credentials and ultimately higher compensation for its workforce (Limardo, Sweeney & Taylor, 2016). The Early Learning

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8 Throughout this Capstone, I use the terms career advancement, career mobility, and professional advancement interchangeably.
Career Pathways Initiative of the U.S. Department of Education explains the potential for the career pathways approach in the sector:

A holistic approach must be taken to further elevate and sustain a high-quality ECE workforce that can meet the challenge of educating our nation’s youngest learner. Career pathways is an effective strategy for creating opportunities for ECE professionals and strengthening the pipeline of a qualified workforce, but the field must better align compensation, training, and advancement opportunities to create the foundation necessary for successful career pathway systems (Limardo, Sweeney & Taylor, 2016, p. 4).

A career ladder or career lattice is a visual representation of a series of educational, training and credentialing benchmarks needed to assume career roles of increasing responsibility and compensation. According to the Alliance for Quality Career Pathways Glossary, career ladders and lattices are “devices that help people visualize and learn about the job options that are available as they progress through a career. Career ladders and lattices consist of a group of related jobs that comprise a career” (CLASP, 2014, p. 37). Career ladders display only vertical movement between jobs while career lattices contain both vertical and lateral movement. The career ladder or career lattice typically outlines at a high level the educational, training and credentialing qualifications aligned to each job. Ideally, career ladders and career lattices serve to inform practitioners and those that support them, such as career advisers and employers, of the path of career progression in the field.

A career pathway is a series of connected education and training programs, work experiences and student support services that enable individuals to enter a profession or advance in a given industry or occupation (Collaborative Economics & the Wolesy Group, Inc., 2014). A career pathway also consists of a number of exit points where an individual can apply accumulated credentials to another profession. According to the Alliance for Quality Career Pathways, a career pathway exhibits three essential features, 1) well-connected and
transparent education, training, credentials and supports; 2) multiple entry points; and 3) multiple exit points. See Figure 1 for a depiction of a career pathway.

Figure 1. Three features of a career pathway - Alliance for Quality Career Pathways

The nursing industry is an example of an effective career pathway. Aspiring nurses can begin as a Certified Nursing Assistant, then transition to a Licensed Practical Nurse/Licensed Vocational Nurse, then become a Registered Nurse, and ultimately become a Nurse Practitioner or Clinical Nurse Specialist. Nurses can stop anywhere along the pathway or can exit the profession and apply their accumulated credentials to another occupation such as a physician. Institutions of higher education and trade schools align their educational and training offerings to the career pathway. Nurses know that as they progress along the career pathway they will assume roles of greater skill and responsibility, and, accordingly, compensation.
Career pathway programs provide educational, training and personal support services that are integral to the functioning of the career pathway (CLASP, 2014). Pathway programs serve four essential functions of the career pathway (See Figure 2): 1) participant-focused education and training; 2) consistent assessments; 3) support services including career navigation; and 4) employment services and work experiences.

Some examples of career pathway programs include registered apprenticeship programs that prepare high school students to become credentialed teachers, and career advising services that counsel practitioners on available career opportunities and ways to meet their requisite qualifications. Career pathway programs can be local, regional or statewide and respond to the needs of a specific segment of the industry’s workers, such as English Language Learners and non-traditional students.
Career pathways and pathway programs form the core of the career pathways system. A career pathways system is the “cohesive combination of partnerships, resources and funding, policies, data, and shared accountability measures that support the development, quality, scaling, and dynamic sustainability of career pathways and programs” (CLASP, 2014, p. 38). Local communities, including community colleges, trainers and employers, design their own career pathways and programs to meet the unique needs of their practitioners or to fill gaps in services the state does not provide. These various public, private and non-profit partners ideally share a vision for building, scaling and sustaining the system and engage their respective organizations in carrying out the needed roles and responsibilities for committing to implementing a common strategy (CLASP, 2014). Industry employers play an integral role in this partnership by contributing time, funds, support and other resources (CLASP, 2014). Employers also articulate the skills and competencies they desire of employees which helps to establish the education and training benchmarks in the career pathway system. The state plays a key role in the system by publicizing regulations and policies and providing resources to support regional and local efforts. The Alliance for Quality Career Pathways graphic shown in Figure 3 depicts the relationships between career pathway systems, career pathways and career pathway programs.
NATIONAL EMPHASIS ON CAREER PATHWAYS APPROACH IN ECE

Nationally there has been an increased emphasis on adopting the career pathways approach in the early care and education sector.

- In 2014, the U.S. Department of Health and Human Services and the U.S. Department of Education commissioned the Early Learning Career Pathways Initiative to investigate promising practices at the program, state and federal levels in advancing career pathways in the early learning industry. The initiative released two reports in 2016 focused on career pathways in ECE: *Early Learning Career Pathways Initiative: Credentialing in the Early Care and Education Field*
and Accessing Career Pathways to Education and Training for Early Care and Education Professionals.

- The Child Care and Development Block Grant reauthorization of 2014 required states and territories to “provide for a progression of professional development which may include encouraging the pursuit of postsecondary education.”

- The Race to the Top-Early Learning Challenge Grants were competitive three-year grants that supported states in developing comprehensive and coordinated early learning systems. States could choose to focus on creating career pathways under the “Supporting a Great Early Childhood Education Workforce” core area.

- The comprehensive and research-based 2015 Institute of Medicine (IOM) and National Research Council (NRC) report, Transforming the Workforce for Children Birth to Eight: A Unifying Foundation recommends that states develop and implement comprehensive pathways for transition to a minimum bachelor’s degree qualification requirement, with specialized knowledge and competencies, for all lead educators working with children from birth through 8 (IOM & NRC, 2015).

- In 2016, the U.S. Department of Health and Human Services (HHS) issued a policy statement highlighting the importance of building a progression of professional development and education opportunities for the early childhood

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9 For further details on the Child Care and Development Block Grant Act of 2014 see: https://www.acf.hhs.gov/sites/default/files/occ/ccdf_final_rule_fact_sheet.pdf
10 For further information regarding the Race to the Top-Early Learning Challenge see: https://www2.ed.gov/programs/racetothetop-earlylearningchallenge/index.html?exp=0
workforce (HHS, 2016). The statement noted, “The framework for state professional development systems should include career pathways as one of its components, helping early childhood educators advance from foundational training through more complex knowledge and practices and the possibility of different roles in the profession” (HHS, 2016, p. 3).

DEVELOPING CAREER PATHWAYS AND CAREER PATHWAY SYSTEMS IN ECE

States interested in embracing the career pathways approach and developing career pathways systems have a variety of generic resources and tools at their disposal that are applicable to any industry. The U.S. Department of Labor’s (DOL) Six Elements Framework for career pathways systems development is designed to guide cross-agency, cross-departmental and cross-program collaboration in federal, state, local and tribal communities working to align their workforce, education and social and human services systems (See Figure 4). The detailed, *Career Pathways Toolkit: A Guide for System Development*, also from DOL, provides further guidance in accordance with the framework. The toolkit explains the essential components of each element of the framework along with strategies that states can adopt. See Appendix D for a list of tools and the links to locate them.
The Early Learning Career Pathways Initiative provides further guidance to states on developing career pathways and career pathways systems in early care and education. Its recommendations align to the DOL Six Elements Framework, advising that states should promote and employ the following six strategies:

1) Provide financial supports and paid release time to acquire professional learning;
2) Provide comprehensive support services that include financial, career, academic and personal support;
3) Leverage technology to increase access to training;
4) Offer accelerated and blended programs that quickly move practitioners to higher skill levels;
5) Create stackable and portable credentials that are valid across states; and

6) Increase the availability of apprenticeships that blend on-the-job training and related classroom instruction.

Once a state develops a career pathways system, state partners can use the Alliance for Quality Career Pathways Framework v. 1.0 as a guide to conduct ongoing assessment of the system and to continue to improve its viability (See Figure 5). Each section of the framework comes with a detailed set of guidelines for states to use in assessing the quality of their career pathway systems.

![Figure 5. Framework Version 1.0 Criteria - Alliance for Quality Career Pathways](image)

**PART III: LEADING IN AN ORGANIZATIONAL CONTEXT OF CHANGE AND UNCERTAINTY**

In addition to exploring the career pathways approach, in this RKA I also explore how to lead work in an organizational context of change and uncertainty. When I entered my residency in the summer of 2016, the organization was undergoing significant change including the organization-wide Integration Initiative and Keystone STARS Re-visioning. Additionally, three weeks into my residency, the Deputy Secretary left the position, which produced some uncertainty about the future of these large initiatives, including my strategic project. These
major changes contributed to an organizational environment of change and uncertainty about the future. Consequently, I sought to understand how someone leads meaningful work in a context of change and uncertainty.

**DEFINING UNCERTAINTY**

Milliken (1987) describes environmental uncertainty or the uncertainty that exists in the context outside of the organization and affects the organization. According to Milliken (1987), there are three types of environmental uncertainty: 1) state uncertainty or the uncertainty in predicting how the environment itself will change; 2) effect uncertainty or difficulty in predicting the impact of the environmental changes on the organization; and 3) response uncertainty or the difficulty in assessing what choices or responses are available to the organization in the face of uncertainty. Although Milliken is referring to factors external to the organization, these states of uncertainty can apply to an individual in an organization that itself is undergoing change.

Clampitt and DeKoch (2001) define the sources of uncertainty as a means to characterize it. Some sources include knowledgeable ignorance or the lack of information, randomness or the arbitrary nature of some events, and complexity or the interrelatedness of multiple parts. The uncertainty at OCDEL is most like the complex variety as it resulted from a number of interrelated changes occurring simultaneously that have unknown implications for many parts of the organization. Clampitt and DeKoch (2001) write, “Anything with many parts and many potential interactions between those parts will be fraught with uncertainty” (p. 52).

**LEADING IN TIMES OF UNCERTAINTY**

Clampitt and DeKoch (2001) offer guidance for leaders seeking to catalyze action in an uncertain environment. First, the leader must do some internal work and catalyze action
within herself. Secondly, the leader must work to catalyze action among the staff. Clampitt and DeKoch (2001) outline five dimensions of catalyzing action within oneself. Look for the deeper pattern among what is happening beneath the surface or what is happening discretely in order to better anticipate future outcomes. Experiment with new actions on a trial basis. Play the odds and predict future outcomes, particularly in times of uncertainty caused by randomness, although this can be risky. Pay attention to intuitions by looking for the deeper pattern, experimenting, and playing the odds. Lastly, different forms of uncertainty require different responses so assess the type and degree of uncertainty to respond most appropriately.

To catalyze action within an organization that is experiencing uncertainty, Clampitt and DeKoch (2001) guide leaders to, hire the right people or those with the emotional intelligence or the ability to act in the face of uncertainty. Smash the clock and embrace the time it takes to process complexity. Clampitt and DeKoch (2001) write, “Sometimes the wisest decision is to delay the decision” (p. 156). Foster “focused flexibility” or the ability to inspire others to quickly shift focus from the present to the future with little loss in productivity. Lastly, develop an integrated strategy because no single idea is sufficient.

**A LEADERSHIP FRAMEWORK FOR TIMES OF CHANGE AND UNCERTAINTY**

Fullan (2001) provides recommendations for managers to lead in times of change and uncertainty or what he calls “a culture of change.” According to Fullan, we live in complex times where we frequently are at the “edge of chaos” or the point of disequilibrium. Fullan (2001) writes, “It is important to be on the edge because that is where creativity resides, but anarchy lurks there too. Therefore, effective leaders tolerate enough ambiguity to keep creative juices flowing” (p. 6). If properly harnessed this disequilibrium can lead to productive coherence where “good things happen and fewer bad things happen.” Fullan’s Leadership Framework outlines five central components that work in tandem to create coherence and
ultimately the internal and external commitment needed to achieve positive outcomes (See Figure 6).

The five elements of the framework are: 1) moral purpose; 2) understanding change; 3) relationship building; 4) knowledge creation and sharing; and 5) coherence making. In the section below, I explain each element. Although the five elements are technically independent concepts, they work in concert to reinforce one another, and—along with three overarching characteristics that an effective leader should possess, enthusiasm, energy and hope—generate internal and external commitment among the team members, which then produces more positive and fewer negative results.

1. MORAL PURPOSE. Moral purpose helps staff find the deeper purpose and vision for their work. It is about developing intrinsic commitment to the work. However, Fullan does
not frame moral purpose as a panacea and he identifies two flaws with viewing it as an ultimate outcome. Firstly, many competing goals cannot all be pursued simultaneously, therefore it is important to prioritize and focus on what is important. Secondly, moral purpose must reconcile diverse interests and goals. In our increasingly complex world, diversity comes in many forms, from race, gender and geography, to interest group alignment. Fullan (2001) writes, “To achieve moral purpose is to forge interaction—and even mutual purpose—across groups” (p. 25).

2. UNDERSTANDING CHANGE. The process in a culture of change is one of rapid movement, non-linearity, and messiness (Fullan, 2001). Fullan contends that in this type of environment it is best to not attempt to control the change process. Instead, leaders must understand and lead change in a way that reflects a deep understanding of its characteristics. Fullan writes, “The goal is to develop a greater feel for leading complex change, to develop a mind-set and action set that are constantly cultivated and refined. There are no shortcuts” (p. 34). He offers six guiding principles to facilitate a deeper understanding of the change process:

i. **The goal is not to innovate the most:** The best leader is not the one with the most ideas, rather, the most effective leaders have “the capacity and commitment to solve complex problems” (p. 37).

ii. **Having the best ideas is not enough:** A leader who understands the change process must also be able to instill commitment in her followers.

iii. **Appreciate the implementation dip:** The implementation dip happens when people must contend with the fear of change and with the need for new skills and talents in order to deal with the change.
iv. **Redefine resistance:** New perspectives and ideas can come from resistors; it is important to involve those who disagree to reduce the risk of subsequent sabotage during implementation.

v. **Reculturing is the name of the game:** The process of reculturing, or changing how people do things, is an ongoing one that is always a feature of the change process.

vi. **Never a checklist, always complexity:** Understanding the change process does not entail completing a checklist of leadership strategies; instead, a leader must wrestle with complexity and trust the change process.

3. **RELATIONSHIPS.** Effective leaders facilitate people coming together to support one another and to engage in learning. “The role of the leader is to ensure that the organization develops relationships that help produce desirable results” (Fullan, 2001, p. 68). Fullan also stresses the importance of what Daniel Goleman calls emotional intelligence. In an environment of change where emotions are charged and conflict can emerge through differences of opinions, effective leaders are able to practice self-awareness, self-regulation, motivation, empathy and social skills in order to work well with others and build relationships with people who disagree with them (Fullan, 2001).

4. **KNOWLEDGE BUILDING.** Effective leaders establish mechanisms and procedures that facilitate and foster knowledge creation and sharing (Fullan, 2001). Leaders work on changing the context by helping to create new settings conducive to learning and knowledge exchange. Central to the knowledge sharing process is soliciting tacit knowledge among group members and sharing that information (Fullan, 2001). Fullan also stresses that knowledge sharing is a relationship-reinforcing process that can both engender relationships and derive from them. He writes, “[…] establishing knowledge sharing practices is as much a route to creating collaborative cultures as it is a product of the latter” (p. 86).
5. **COHERENCE.** Coherence is making sense out of the messiness and chaos of complexity because within the messiness of change, there is value, creativity, and innovation. Coherence is a balance between allowing chaos to persist—because that is where innovation can best happen—and establishing a balance by harnessing the dissonance.

A constellation of personal characteristics, energy, enthusiasm and hopefulness surround the five framework elements. These attributes both drive the five elements and are a product of the five elements. There is a “dynamic, reciprocal relationship between the two sets” (Fullan, 2001, p. 7). Fullan notes,

…effective leaders make people feel that even the most difficult problems can be tackled productively. They are always hopeful—conveying a sense of optimism and an attitude of never giving up in the pursuit of highly valued goals. Their enthusiasm and confidence (not certainty) are, in a word, infectious, and they are infectiously effective, provided that they incorporate all five leadership capacities in their day-to-day behavior (p. 7).

The intended outcome of a leader embracing the five elements are internal and external commitment among the team members, according to Fullan’s framework. “The litmus test of all leadership is whether it mobilizes people’s commitment to putting their energy into actions designed to improve things” (p. 9). Fullan, referencing Chris Argyris, describe external commitment as being triggered by policies and practices external to the actor while internal commitment is derived from energies internal to the actor activated because of intrinsic reward. Although external commitment can be valuable, driving internal commitment is the harder task that is also the most linked to long-term collective mobilization (2001).

The interplay of the five leadership elements and the commitment among the group members causes “more good things to happen and fewer bad things to happen” (p. 10). The exact nature of the good things relies on the context and in general, the fewer bad things
include, “fewer aborted change efforts, less demoralization of employees, fewer examples of piecemeal uncoordinated reforms, and a lot less wasted efforts and resources” (p. 10).

THEORY OF ACTION

The research in my RKA enhanced my understanding of the career pathways approach and ways to lead in times of change and uncertainty. I devised the following theory of action to guide my initial steps in the strategic project:

If, I incorporate labor industry frameworks and tools, and emerging and best career pathways system development practices, into my work, and lead the team through a process of grappling with the complexity and uncertainty of our endeavor, then the team will move from the sole emphasis on the career lattice to a career pathway system development process, and assume the leadership of the career pathways development endeavor, and then Keystone STARS will align its standards, policies and procedures to the revised career lattice.

As a result of this theory of action, I expected the group to produce a new version of the career lattice and demonstrate some indication of its involvement in the larger system development process. Ultimately, early childhood practitioners in Pennsylvania would be able to access career pathways that would propel them in the field and obtain increased compensation. I do not include this final impact as part of my theory of action because it is not discernable during the timeframe of my strategic project.

THE STRATEGIC PROJECT

My strategic project focused on guiding a team at the Pennsylvania Office of Child Development and Early Learning (OCDEL) through a process of redesigning the Keys to Quality Career Lattice. I sought to leverage that task to engage the team in a larger effort of developing a career pathways system, including the strategies and supports needed to help
advance practitioners through the profession. My work aligned to two priority initiatives of OCDEL: Integrating and Aligning OCDEL Services (Integration Initiative) and Keystone STARS Re-visioning. I led this work as part of the leadership team at OCDEL where I reported to the Deputy Secretary, under supervision of the Chief of Staff.

**EVOLUTION OF THE THEORY OF ACTION**

I began the strategic project with the primary outcome of interest in moving the team from a sole focus on the career lattice to focusing on the career pathways system. The team made the pivot to the systems development effort quickly in the strategic project. By the fourth meeting, the team had acknowledged the need for a career pathways systems approach. It became clear to me that I needed a stronger strategy to guide the remainder of my work, and I revised my theory of action to emphasize my leading the team through the career pathways system development process. I also added a new input of interest emphasizing the need for a cross-functional team that included representatives from across the organization. Lastly, I added another outcome of interest to highlight the role of the organization in institutionalizing the career pathways approach.

This revised theory of action better supports my argument that OCDEL should adopt a career pathways approach as the crux of its workforce development strategy and that the Career Pathways Work Group could serve as an example of the cross-functional and integrated processes promoted in the Integration Initiative. Furthermore, during this time of organizational change and uncertainty, it was imperative that leaders of OCDEL establish coherence between its vision for the workforce and the systems of supports and strategies in place to effect that vision. My revised theory of action states:

*If, I engage a cross-functional team using labor industry frameworks and tools and emerging and best career pathways system development practices, and lead them in a process of*
grappling with the complexity of our endeavor, then *the team will develop a vision* for the career pathways system, move from the sole emphasis on the career lattice to a system development process, *engage in that system development process*, and assume the leadership of the career pathways development endeavor, and then Keystone STARS will align its standards, policies and procedures to the revised career lattice, and *OCDEL will use the career pathways approach to guide all state workforce development initiatives.*

**DESCRIPTION**

I organize my strategic project into three parts centered on the third team meeting when the group began to pivot toward a broader scope of work. Part 1 or “Pre-Pivot” encompasses my entry into the strategic project and the initial team meetings where I emphasize the value of vision-setting as means of fostering a desire for a broader scope of work. Part 2 or “The Pivot” represents the third meeting where the team pivoted away from a narrow focus on the career lattice toward expressing the desire to engage in a broader career pathways system development effort. Part 3 or “Post-Pivot” represents the series of meetings where I engaged the team in an expanded suite of deliverables and began the process of career pathway systems development. Table 1 outlines the three parts of the strategic project, the associated inputs, or “Ifs” statements, the aligned anticipated outcomes, or “Thens” statements, and the anticipated results to indicate outcome attainment.
<table>
<thead>
<tr>
<th><strong>“If” of Theory of Action</strong></th>
<th><strong>“Then” of Theory of Action</strong></th>
<th><strong>Expected Results</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRE-PIVOT: ENTRY INTO THE STRATEGIC PROJECT</strong></td>
<td></td>
<td></td>
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<tr>
<td>I engage a cross-functional team</td>
<td>The team will develop its vision for the career pathway.</td>
<td>Vision statement</td>
</tr>
<tr>
<td><strong>THE PIVOT: WRESTLING WITH THE COMPLEXITY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lead the team in a process of grappling with the complexity and of their endeavor</td>
<td>The team will move from a sole emphasis on the career lattice and recognize the need to engage in a systems development process.</td>
<td>Revised career lattice</td>
</tr>
<tr>
<td><strong>POST-PIVOT: FROM CAREER LATTICE TO CAREER PATHWAYS SYSTEM</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide the team with relevant national labor industry frameworks</td>
<td>The team will engage in a career pathways system development process.</td>
<td>Articulated policies, strategies and structures needed to support career advancement of practitioners</td>
</tr>
<tr>
<td>Expose the team to emerging and best practices from other early care and education career pathways</td>
<td>The team will assume the leadership of the career pathways development work. Keystone STARS will align its standards, policies and procedures with the revised career lattice. OCDE will adopt a systems approach to workforce development and use the career pathways approach to guide all state workforce development initiatives.</td>
<td>Continuing to hold meetings and implement the career pathways system approach Keystone STARS indicators reference the new career lattice Strategic plan used to guide workforce development effort</td>
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</tbody>
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**Table 1. Three Parts of the Strategic Project**
PART 1: PRE-PIVOT, “ENTRY INTO THE STRATEGIC PROJECT”

Prior to officially starting the strategic project, I engaged in a series of meetings with two key organizational leaders, the Director of the Bureau of Early Learning Services (BELS) and the Director of the PA Key. The BELS Director stressed the importance of revising the career lattice in anticipation of the Keystone STARS revisions, and the PA Key Director was involved in career pathways discussions with higher education staff regarding courses for early care and education practitioners. Our small team agreed in our conversations that it was important to expand the scope of the career lattice redesign to include a systems plan that could be a guide for the state’s workforce development and professional development efforts. I was charged with pulling a team together to lead this work.

The members of my team included key OCDEL staff representing the Bureau of Certification Services, Bureau of Early Learning Services and the Bureau of Subsidized Services. I also engaged staff from OCDEL’s key professional development business partners, the PA Key and Early Intervention Technical Assistance. These members constituted leadership staff from across the agency with deep knowledge of workforce development issues and existing engagement in workforce development efforts. Additionally they represented those with the authority to enact the team’s recommendations. Both the BELS Bureau Director and the Director of the PA Key remained engaged in the work group.

During the first two meetings, the group coalesced around the immediate task of the strategic project, the revision of the career lattice. I established a timeline for the work and a frequency of engagement. I also presented examples of other state career ladders and career lattices to discuss common elements and provide ideas of how the team might reference credentials and degrees in our model. I also introduced recommendations from the Institute of Medicine and National Research Council’s *Transforming the Workforce* report to ground our
discussions in the latest research. In addition to discussing the elements of the career lattice, I led the team in discussions of the configuration or structure of the career lattice that might make it a more navigable tool.

I also engaged the team in developing a team vision for the career pathway. Individuals drew depictions of their ideal career pathways and shared their versions with the group (See Appendix E). The vision drawing exercise provided a concrete way for team members to convey their opinions and values about the career pathway. The drawings illuminated points of commonality and areas of divergence among the team members. One team member suggested a career pathway that did not require a higher education degree. Many balked at this suggestion and stressed that other viable professions require a higher education degree as a gateway to entry. Most members emphasized the need for credit-bearing training, and everyone agreed that the low wages of the sector were a significant obstacle to achieving career advancement. I used these similarities and differences in our discussions when drafting the Goal Statement. The Goal Statement provided a literal mechanism for the team to begin to wrestle with, and come to consensus on, its common vision for the ECE profession (See Appendix F). To facilitate the consensus building during the Goal Statement drafting process, I grounded our work in the latest research of the IOM and NRC *Transforming the Workforce* report. This helped to move the team away from differences based on values, experiences or biases, and toward points of objective convergence based on evidence and research. The visioning work grounded the group’s efforts moving forward and provided a platform for future decisions. Essentially, I wanted the team to zoom out from its concentration on the design of the career lattice to consider its larger vision for the career pathway system.
PART 2: THE PIVOT, "GRAPPLING WITH COMPLEXITY"

Meeting #3 constitutes the second part of the strategic project. In this meeting, I focused on finalizing the Goal Statement for the career pathway that the team had begun in the prior meeting. During this discussion, the team articulated the driving forces for the career pathway including an emphasis on foundational and specialized knowledge and consistency of professional learning across the state. Here again, I used the IOM and NRC report *Transforming the Workforce* to ground the group’s discussion.

I then shifted the team’s discussion to the elements of the career lattice including the references to higher education degrees and credentials. As the team members discussed the details of the career lattice, the many implications for including or omitting various elements arose and the interconnectedness and complexity of those implications became evident. Team members raised concerns about the role OCDEL and its partners could play in effecting the change of the career lattice. They remarked on the need to address the larger systems issues, such as evaluation and ongoing professional development, along with setting benchmarks for qualifications.

In this meeting, the team wrestled with the chasm between the vision it had articulated for the career pathway and the insufficiencies of the current system to support that vision. The team began to understand that, in order for the career lattice to have an effect, they also needed to address the strategies, policies, incentives and programs necessary to support professional advancement. At the end of this meeting, team members expressed a desire to expand the group’s purview to include informing the systems changes needed to engage practitioners effectively in the new career pathway.
PART 3: POST-PIVOT, “A TIME TO COHERE”

In this part of the strategic project I sought to harness the disturbance that emerged during Meeting #3, formalize the pivot of purpose, and channel it into a new direction of work for the team. I wanted to make it clear that the team was now engaged in a different type of work—the work of career pathways systems development. In this work, we would turn our attention to the structures, supports, policies and partnerships needed to promote career advancement. I used Design Thinking protocols to reframe the “problem” of interest—moving from the career lattice as the problem to the disjointed systems of programs and supports as the problem. By reframing the problem, the team could focus on a new common purpose. I began to introduce the language, definitions and frameworks specific to career pathways systems development into my discussions with the team to create a common ground of understanding and a common place for us all to enter the work.

In this part of the strategic project, I also used national labor industry frameworks and other guiding tools to direct and structure my work with the team. I strongly believe that the early care and education sector should align its career pathways development practices to those of other industries that have grappled with similar workforce issues. By doing so it can avoid common pitfalls, adopt successful strategies and obtain greater legitimacy as a profession by aligning to labor industry standards. I primarily used the DOL Six Elements Framework, the Career Pathways Toolkit and the Alliance for Quality Career Pathways systems frameworks, definitions, planning tools and examples to guide my efforts with the team.

Guided by the DOL Six Elements Framework and the Career Pathways Toolkit, I incorporated a number of increasingly detailed deliverables to scaffold the team’s entry into

11 Design Thinking is a method used to solve complex problems by focusing on the needs of the user. For further information see: http://www.ideou.com/pages/design-thinking
the systems development work. Building from the team’s previous work on the Goal Statement, I used the Design Thinking exercises to craft user needs statements for the workforce. These statements then became the components of a Theory of Change that established the high-level strategy for the career pathway system (See Appendix G). Once the team drafted the Theory of Change, I asked them to extend that theory into a Logic Model format that provided a comprehensive representation of the state’s vision and plan for the career pathway system (See Appendix H). I aligned the priority areas of the Logic Model to the DOL Six Elements Framework categories, so that all subsequent inputs, outputs, outcomes and priorities would relate. The Career Pathways Toolkit further advises states to develop an inventory of relevant training and coursework, use that map to identify gaps in services and leverage that information to drive a strategic planning process. Although the team agreed to the value of these next steps, none began before the end of the strategic project.

Throughout the strategic project, I maintained a connection to the Keystone STARS Re-visioning team. I briefed the Keystone STARS Re-visioning Work Group on our initial career ladder design and obtained feedback that the Career Pathways Work Group incorporated into the future design of the career ladder. I also attended critical Keystone STARS Re-visioning meetings to stay abreast of the developments happening in that system.

I also periodically met with the Deputy Secretary to apprise her of the strategic project progress and to gauge her interest in our efforts. She and I explored how she saw the career pathway systems development fitting into the overall strategy of OCDEL. Lastly, I also met with the BELS Director periodically to have similar conversations, as she oversees the office’s workforce development efforts.
EVIDENCE

In the following section, I examine the evidence that the intended outcomes, as articulated in my theory of action, occurred during the strategic project. I explore to what extent I met or made progress on achieving my outcomes in the project. I will examine the results aligned to the three parts of the strategic project. Table 2 outlines the theory of action according to the three parts of the strategic project and the associated evidence of interest.

<table>
<thead>
<tr>
<th>“If” of Theory of Action</th>
<th>“Then” of Theory of Action</th>
<th>Evidence</th>
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<tbody>
<tr>
<td><strong>PRE-PIVOT: ENTRY INTO THE STRATEGIC PROJECT</strong></td>
<td></td>
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<tr>
<td>I engage a cross-functional team</td>
<td>The team will develop its vision for the career pathway.</td>
<td>Vision illustrations Goal Statement</td>
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<tr>
<td><strong>THE PIVOT: WRESTLING WITH THE COMPLEXITY</strong></td>
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<tr>
<td>Lead the team in a process of grappling with the complexity and of their endeavor</td>
<td>The team will move from a sole emphasis on the career lattice and recognize the need to engage in a systems development process.</td>
<td>Team discourse</td>
</tr>
<tr>
<td><strong>POST-PIVOT: FROM CAREER LATTICE TO CAREER PATHWAYS SYSTEM</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide the team with relevant national labor industry frameworks</td>
<td>The team will engage in a career pathways system development process.</td>
<td>Deliverables</td>
</tr>
<tr>
<td>Expose the team to emerging and best practices from other early care and education career pathways</td>
<td>The team will assume the leadership of the career pathways development work.</td>
<td>Team’s verbal commitment to meet and continue the work</td>
</tr>
<tr>
<td></td>
<td>Keystone STARS will align its standards, policies and procedures with the revised career lattice.</td>
<td>Keystone STARS indicators reference the new career lattice</td>
</tr>
<tr>
<td></td>
<td>OCDEL will adopt a systems approach to workforce development and use the career pathways approach to guide all state workforce development initiatives.</td>
<td>Leadership commitment to work group</td>
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</table>

Table 2. Theory of Action and Associated Evidence
PART 1: PRE-PIVOT, “AN ENTRY INTO THE STRATEGIC PROJECT”

In this part of the strategic project, the team made progress toward developing a common vision for the career pathway. First, team members drew their individual visions for the career pathways (See Appendix E). Through these visual depictions, members were able to articulate to themselves and to others their values and goals for the workforce. What one can see from these visuals is the differences and similarities that team members possessed regarding their visions for the career pathways. For example, in one depiction a team member creates two separate pathways: one for new entrants to the field and another for existing practitioners. Another visual depicts a rhizome as the career pathway, connoting the interconnectedness of the many facets of the career pathway to highlight its complexity. All visuals depicted the importance of money as both a support to propel practitioners forward in their careers and as an expectation for increased credential attainment. After the individual exercise, I led the team in revising the Goal Statement (See Appendix F) that articulates the organization’s vision for the career pathway. In this statement, the team emphasized the value of professional learning including the role of foundational and specialized knowledge. The team also articulated the importance of creating a consistent statewide career pathway system that was intentional, reflective and goal-oriented. The team would continue to refine the Goal Statement during the next period of the strategic project, The Pivot.

PART 2: THE PIVOT, “WRESTLING WITH COMPLEXITY”

The main outcome of interest in this part of the strategic project was the team’s pivot to the broader scope of work that included a focus on the career pathway system design and development. The team’s discussion during the third meeting indicated to me that it was pivoting toward this broader scope of work. During intense conversations about the vision of the career pathway and the specific components of the career lattice, group members
questioned the effectiveness of establishing aggressive benchmarks on the career lattice if the supports were not in place to help people meet those benchmarks. Further questions about the purpose of our endeavor, the target audience for the career pathway, and the constituency of the work group that would make critical decisions were also voiced. This questioning showed me that the team was wrestling with the limitations of the current system to support its new vision for the profession as reflected in the revisions of the career lattice.

Below are some quotes from the meeting that led me to believe team members were pivoting:

- “Are competencies necessary? How are we evaluating competencies?”
- “We should incentivize child care providers to continue reaching for the next level.”
- “How do we get degrees in people’s hands?”
- “We need constant evaluation of educators.”
- “This is a tremendously low paying field with high turnover. How much do we invest to prevent this?”
- “We need to get people started on working towards a CDA12 immediately.”
- “Colleges aren’t getting students day-one ready. It isn’t realistic.”
- “Will this actually create any change in education programs?”
- “We need a prenatal to five certification or birth to five certification.”

12 A CDA or Child Development Associate is the most widely recognized credential in early childhood education and is a key stepping stone on the path of career advancement in ECE. It is based on a core set of competency standards, which guide early care practitioners as they work towards becoming qualified teachers of young children. Four credentials are offered: Center-based, Infant-Toddler (birth-36 months), Center-based, Preschool (3-5 years), Home-based Family Child Care (birth-5 years), and Home Visitor (families of children birth-5 years).
The words highlighted in bold in particular signaled to me that team members were grappling with the broader implications of the career pathway, with their own role in that system and with OCDEL’s role in supporting practitioners to meet higher quality levels. For example, the emphasis on the need for an evaluative component to drive professional learning was clear. In addition, team members discussed needed incentives, beyond increased compensation, to compel practitioners to attain higher qualifications. During this discourse, the role of OCDEL as the agent of change became clear and team members wrestled with the challenges and opportunities that presented.

**PART 3: POST-PIVOT, “FROM CAREER LATTICE TO CAREER PATHWAY SYSTEM”**

Now that the team had made the pivot of purpose, I was very interested in seeing some indication of the team’s engagement in the system development effort. I was also interested in how others would receive the product of our work, particularly the new career lattice. The sustainability of the work group and the eventual organizational alignment to the efforts of the work group were also outcomes of interest to me at this time.

**DELIVERABLES.** I led the team in expanding its suite of deliverables that aligned to the strategic project. These deliverables proved to be evidence of the team’s engagement in the career pathways system development process. The Theory of Change and the Logic Model serve as artifacts of the group’s increased engagement in the specificity of the systems design process. The team also revised the career lattice to become the Early Care and Education Career Ladder that references the aspirational alignment between qualifications and position roles for practitioners serving children birth to age five or the time of school entry in the state of Pennsylvania (See Appendix I). Unlike the career lattice, the career ladder only depicts a vertical progression of career advancement. It also does not reference the minimal
qualification standards. Instead, it sets a progressive vision for the professionalization of the early care and education field.

**COMMITMENT.** During this final part of the strategic project, I was interested in establishing commitment with the team to continue its engagement beyond my leadership of the work. I knew that we could not accomplish everything during the timeframe of my strategic project, so it was important that the team would continue its efforts. The career pathway system would only be successful with ongoing monitoring and an entity leading the tracking of progress toward the goals. My team verbally committed to continuing to develop the career pathways system for early care and education practitioners beyond our time in the strategic project. They expressed a desire to create additional work products such as a training inventory and to engage in a strategic planning process. We planned monthly meetings through June 2017 under my leadership. At the time of the writing of this Capstone, neither new leadership to continue the facilitation of the group beyond my tenure was identified, nor had future meeting frequency and structure been determined.

**ALIGNMENT.** I began the strategic project with the initial task of redesigning a career lattice that Keystone STARS would align to its new system. Keystone STARS agreed to reference the new career ladder in its draft performance indicators for staff qualifications and to provide supports to help practitioners along the career pathway. Although there were some concerns about the cost of implementation, there was little contention with the career progression benchmarks on the career ladder. When the new system is in place (July 2017), the plan is to award programs points for the percentage of staff engaged in, and making

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13 Please note, the timeframe encompassed in this “strategic project” is June 2016 to March 2017. I did continue to work with the Career Pathways Work Group through June 2017.
progress along, the career pathway and award additional points for staff who achieve the career pathway benchmarks.

**FUTURE ORGANIZATIONAL ADOPTION.** Ultimately, I wanted the efforts of the Career Pathway Work Group to guide all workforce development efforts at OCDEL. There was some evidence of organizational commitment to the career pathways process during the course of the strategic project. The deputy secretary confirmed the value and importance of the Career Pathways Work Group and the systems development plan to guide all of OCDEL’s workforce development strategy, beyond Keystone STARS. She agreed that the work should guide the agency’s workforce development efforts moving forward. Ultimately, however, there was not enough time during the course of the strategic project to ascertain whether this would eventually come to fruition.

**ANALYSIS**

My strategic project successfully evidenced many of the intended outcomes I hoped would occur as articulated in my evolved theory of action. The team pivoted to a broader purpose and engaged in the career pathway system development effort. Keystone STARS embraced the new career ladder and aligned it to their system. The Career Pathways Work Group is committed to meeting for the near future to engage in additional planning efforts including the development of strategic action plan, and there is some indication that the plan will guide the office’s workforce development efforts.

I utilized four main leadership strategies that led to the successful outcomes of the strategic project. (1) I managed the complexity of the endeavor by scaffolding my team’s engagement and grounding its work in a vision; (2) I calibrated my leadership moves to the learning needs of the team; (3) I created short-term wins to maintain momentum and foster
commitment to the process; and (4) I engaged my authorizers to build legitimacy and support. In the section below, I discuss these four themes in accordance with the three parts of the strategic project as well as how they relate to both specific and overall outcomes of the endeavor.

I. MANAGE COMPLEXITY

Career pathways system design and development is a complex endeavor. There are many interconnected parts and a change in one part of the system can affect the other parts of the system in intended and unintended ways. As such, this complex work is ripe with uncertainty. Fullan (2001) writes of leading in a time of change or complexity. He notes that we live in complex times where we are frequently at the edge of chaos. “Leadership, then, is not mobilizing others to solve problems we already know how to solve, but to help them confront problems that have never yet been successfully addressed” (p. 30). The process in a culture of change is one of rapid movement, non-linearity and messiness (Fullan, 2001). Fullan contends that in this type of environment it is best to not attempt to control the change process. Instead, leaders must understand and lead change in a way that reflects a deep understanding of its characteristics. Because of my understanding of the complexity of career pathways system development endeavor, and my ability to manage the complexity of my team’s engagement in that process, the team not only revised the career lattice but also made demonstrative progress on the systems design and development work.

In Part 1 of the strategic project, I eased my team’s engagement into this complex work by using a developmental approach of scaffolding increasingly complex information and exercises to not overwhelm or discourage the team. I used the discrete task of the career lattice redesign as an entry into the complex work of career advancement and workforce development. Although I entered the strategic project knowing that a sole focus on the career
lattice was insufficient, and I wanted my team to engage in the systems development work, I did not present these ideas to the team initially. I was uncertain that the team was ready or willing to engage in that level of complexity. Instead, I used the discrete task of the career lattice redesign to ease the team into the larger more complex work until I was able to gauge their readiness for the systems work. This proved to be a good strategy because the need for the new career lattice was timely and urgent; Keystone STARS needed it for the imminent revisioning process. This urgency gave our discrete task a sense of value and purpose (Kotter, 1996).

I also managed team members’ engagement in the complexity of the work by using a vision statement for the career pathway to ground their thinking. During the first part of the strategic project, I led the team in developing a broader vision for the career pathways effort beyond the immediate task of redesigning the career lattice. Kotter (1996) defines vision: “Vision refers to a picture of the future with some implicit or explicit commentary on why people should strive to create that future” (p. 68). I felt it was important for the team to have a larger vision for the career pathway as it engaged in the specific changes of the career lattice. The vision served as a touchpoint to guide the team’s future important decisions, particularly during times of disagreement. Kotter (1996) writes of the importance of developing a vision for the work and notes that a vision serves three purposes: clarifies the general direction for change by simplifying detailed decisions; motivates people to take action in the right direction; and helps coordinate the actions of different people in a fast and efficient way.

Team members came to the strategic project with very strong beliefs about the profession and their goals for the workforce. I viewed my role as eliciting individual member’s moral purpose, and facilitating the team in using these principles to create a common vision for the workforce. The vision, in the form of the Goal Statement, served as a touchpoint for
future work and future engagement in the complexity. In subsequent conversations where I felt that the team was perseverating on topics, or getting off on tangents, I returned the team to the Goal Statement to say, to what extent does this change in the career lattice get us closer to achieving the vision for the workforce? The vision allowed us to prioritize our values, gain clarity and consensus around those values and strategically plan.

I also managed the team’s involvement in the complexity of the work by doing what Heifetz calls “raising the temperature.” Heifetz (1994) writes, “Keep the level of distress within a tolerable range for doing adaptive work.” (p. 128). I intentionally created distress at times to move the team forward in the process. In Part 2 of the strategic project, I created disequilibrium by toggling between a focus on the vision for the career pathway and the discrete task of redesigning the career lattice. The team grappled with the tension of wanting to achieve its vision for the workforce and recognizing the insufficiencies of the immediate task of redesigning the career lattice to achieve that vision. Fullan (2001) writes, “Productive disturbance is likely to happen when it is guided by moral purpose and when the process creates and channels new tensions while working on a complex problem” (p. 110). The Goal Statement served as the team’s vision or moral purpose for the strategic project and as such it “sets the context [and] calls for people to aspire to greater accomplishments” (p. 117). Fullan writes, “[...] moral purpose cannot just be stated, it must be accompanied by strategies for realizing it, and those strategies are the leadership actions that energize people to pursue a desired goal” (p. 19). The redesign of the career lattice now felt like an insufficient strategy for realizing the vision of the career pathway. This insufficiency increased the team’s appetite to address the larger systems issues.

In Part 3 of the strategic project, after the team had pivoted to the broader purpose and was now concerned with the career pathways system development, I used discrete
deliverables of increasing details to again manage the complexity of the endeavor. As opposed to initially leading the team in a detailed strategic planning exercise, I chose smaller exercises that built upon one another. For example, I led the team in expanding the Goal Statement into a Theory of Change for the organization to address the broad inputs and intended outcomes that would move the organization toward the vision for the profession expressed in the Goal Statement. Then, once the Theory of Change was in place, I moved to the team to creating a Logic Model that would provide specific guidance in enacting the Theory of Change.

I scaffolded my team’s engagement in the systems design work as a way to manage the complexity of our endeavor. While still focusing on the task that had brought the team together, when I saw an opportunity to push toward the larger systems development work, such as with the vision exercises, I took it. This persistent push and pull is what I describe as calibrated leadership below.

II. CALIBRATE LEADERSHIP

Fullan (2001) writes that the complexities of leadership demand different strategies for different circumstances. A leader should calibrate one’s leadership and engagement with the team based on its immediate needs in order to be responsive and effective. Closely tied to managing the complexity of the endeavor is how I calibrated my leadership moves to meet the team where they were in the process. In this push and pull, when I saw an opportunity for growth I took it. A leader must at once be with the team, be responsive, and at the same time be ahead of the team—knowing where to guide it next. Therefore, this calibration to the team’s needs is critical to advancing the work. My calibration to the team’s needs allowed me to keep the momentum going, engage the team in learning processes and enabled the team to produce meaningful results.
My calibration efforts were especially necessary during Part 3 of the project when I led the team in the career pathway system development process. This was a new process for me as a leader and for the team. We were all learning together. Therefore, I felt that in order to foster productive engagement I needed to be in lockstep with the team, and have an intention of where I ultimately wanted the team to end up. Although I was responsive to my team, I was also intentional and planful in leading the team and encouraging members to remain actively engaged. Fullan (2001) writes, “The goal is to develop a greater feel for leading complex change, to develop a mind-set and action set that are constantly cultivated and refined. There are no shortcuts” (p. 34).

At times calibration was a challenge because some team members were ready to engage in the systems development work while others were still grappling with the implications of the work through their own particular, narrow, perspective. As the leader, I had to know where each team member was in the process and establish ways of engagement that would bring some along to where I wanted them to be and ways of engagement that would not lose or disinterest those who were ready to move forward. I met with the team members who expressed an early desire to engage in the systems development discussion outside of the team meetings to get their thoughts on the next steps of the work. I then used this information, along with other level-setting information that I felt other team members needed in order to contribute to the systems development work, to structure my meetings with the team.

In addition to checking in with individual team members, I also used reflective leadership practices as a tool to calibrate my leadership moves with the team. My reflective leadership practices allowed me to gain insight into the state of the team members. I then measured my actions against that reflection. Specifically, immediately after each team meeting I wrote down my reflections of the meeting, whether or not we had met the intended goals,
and why I thought we did or did not. I used the agenda topics to guide my reflection. Then later on the walk home, I would audiotape an oral reflection that again reflected on what happened in the meeting. In the oral reflection, I would explore further what more I needed to learn to engage the team, who I needed to speak with, and how I needed to frame the next meeting. I also tape-recorded every team meeting and played it back when I needed to remember what transpired in the meeting. I used my reflections as data to, as Clampitt and DeKoch (2001) suggest, find the deeper patterns, pay attention to my intuitions, and assess the type and degree of uncertainty to respond most appropriately.

I also used reflection in my work to see the totality of the situation and better understand my role in it. Castelli (2016), writes, “Reflection causes us to examine the ideas and assumptions that shape our behavior which leads to greater self-awareness. Reflection increases understanding of obstacles and evokes critical thinking skills in order to arrive at meaningful solutions” (p. 231). Heifetz (1994) writes of getting on the balcony, removing oneself from the action of the work, or the dancefloor, and gaining a broader perspective of what is happening, and one’s role in what is happening. My reflection allowed me to get on the balcony so that I could gain perspective on what was happening on the dancefloor. When I returned to the dancefloor, I had greater understanding of the needs of my team. Some of the solutions I employed with the team were experimental for me based on ideas I had during reflection. I employed illustrative exercises and Design Thinking protocols as a means to experiment with new ways of learning.

Closely tied to my reflective leadership practice was my role as a learner throughout the strategic project. I did not know a great deal about career pathways system development when starting the strategic project. I was learning about this work just as much as my team, if not more. Not only was I learning about my team through my reflective practices, I was also
learning about my own areas of development to guide the team effectively. I did not have all the answers. Indeed, I did not know all of the questions. The questions emerged from the work and discourse amongst the team. I then uncovered the information to contribute to the team’s learning and development.

The actions I took with the team, and the resulting deliverables, evolved based on what I learned from both the labor industry guidance and from the developments with my team. Rather than beginning with a set plan of action, I tailored my approach with the team based on the stage of our work and the consensus of the team on each issue. Fullan (2001) writes that in understanding the change process, “[…] there can never be a recipe or cookbook for change, nor a step-by-step process” (p. 44). Instead, a leader must let the experiences in the work lead her actions. Fullan calls this leadership style “slow knowing.” Slow knowing requires an understanding that the leader does not have all of the answers. Indeed a bit of uncertainty is helpful in this process because the leader remains attentive to developments that require a pivot and change of course. My reflection and learning were both in service of moving the team toward the eventual goals.

### III. Create Short-Term Wins

Kotter (1996) talks about generating short-term wins as a means to visibly recognize and reward people for their efforts. Short-term wins “give the effort needed reinforcement by showing that the effort is paying off” (p. 122). They offer an opportunity to celebrate and recharge batteries, both of the leader and of the team and help to fine-tune and test the vision against concrete conditions. Short-term wins can also undermine cynics and resisters and demonstrate to authorizers that transformation is on track. Lastly short-term wins work to build momentum. Kotter (1996) describes effective short-term wins as those that are visible, unambiguous and clearly related to the change effort.
I used small, short-term wins by way of discrete deliverables of increasing specificity as a means to keep the team engaged and not overwhelmed by the complexity of the goals. The discrete deliverables demonstrated to the team and to others that we were engaged in a broader scope of work beyond the redesign of the career lattice and produced clear evidence of my team’s learning and efficacy. The deliverables increased in detail and complexity, which gave the team increased confidence that we were making progress in our understanding of the career pathway issues, thereby contributing to the team’s momentum and commitment to the process.

Perhaps the most significant short-term win in the strategic project was the production of the revised career ladder. This signaled to the team that we could accomplish a needed task of great significance and engage in the complex work of the career pathways systems development. After this accomplishment, I hosted a party for the team to celebrate the achievement. I knew that we had a lot more work ahead of us but I wanted to both celebrate what we had achieved so far and regenerate our excitement for the work that lay ahead. I received feedback from team members that this celebration felt good and was a needed opportunity to recharge their batteries.

The commitment generated by the short-term wins led my team to express initial interest in continuing the work group beyond my tenure at OCDEL. Commitment, especially internal commitment is critical to the long-term success of the systems development effort (Fullan, 2001). Fullan writes, “In the long run…effectiveness depends on developing internal commitment in which the ideas and intrinsic motivation of the vast majority of organizational members become activated” (p. 46). The members of the work group were not just advisors to the process; they were also the people charged with implementing the work. Therefore,
their commitment was paramount to achieving successful outcomes for the goals of the team’s work.

IV. ENGAGE AUTHORIZERS

The Keystone STARS system will align its standards, policies and procedures to the new career ladder. I successfully aligned the career ladder to Keystone STARS because external actors to the career pathways system development process viewed our work as legitimate and well-informed. By engaging the BELS Director, who was also leading Keystone STARS Revisioning, in the career pathways process, I garnered initial legitimacy. In addition to engaging the BELS Director in my team meetings, I also met with her individually to make sure I was on track with how I was steering the work and that we were on track to accomplish what she and Keystone STARS needed. I also presented periodically to the Keystone STARS Revisioning Work Group to keep them informed of the team’s efforts and to solicit feedback. The team incorporated this feedback into the eventual design of the career ladder.

OCDEL leadership expressed some commitment to the continuation of the Career Pathways Work Group and using its outputs, particularly a strategic plan, to guide the organization’s overall workforce development efforts. Leadership staffs’ continued engagement in the work group conveyed a message about the priority of the career pathways work and OCDEL’s commitment to it. The BELS Director, PA Key Director and EITA Director’s involvement signaled to members of the team that this was an important project worthy of their time investment. I also engaged these key leadership staff outside of the work group meetings to gauge how they were experiencing the process and to assess if I was on the right track. They provided critical guidance to the work, and it was helpful to get insight into their thinking. I adjusted my plans with the team based on their feedback. I also periodically
provided status updates of the work group’s progress to the deputy secretary to keep her abreast of our endeavors and gather her feedback on our deliberations.

I could have built additional institutional buy-in into our process by engaging even more intentionally with organizational leadership. For example, I could have conducted debriefings of the work group activities at the weekly Executive Leadership team meetings, or had even more frequent communications with the deputy secretary and shared the team’s deliverables with her more directly. Although she and I discussed some potential elements of the revised career ladder, I did not present the final version to her for feedback. This insufficient engagement with leadership has implications for garnering greater legitimacy for the work group. Moore (2013) writes of the importance of engaging authorizers in the work and the need for a public manager to “look upward toward the political authorizing environment that both provided resources and judged the value of what they were producing” (p. 7). Not doing so can have disastrous implications for the success of the endeavor and for the fate of the leader. Progress on the work might stop or the implementation of the work products might languish due to lack of resources or support. Worst of all, the leader might be removed from the position of influence and relegated to other tasks. Moore (1995) writes, “Managers need permission to use public resources in pursuit of a given enterprise; or they need [authorizers’] operational assistance to help produce the results for which they are responsible. Because these officials lie beyond the scope of managers’ direct authority, managers cannot simply command their compliance. Instead, they must persuade them. This is what makes it appropriate to see the task as political rather than managerial” (p. 114).

I employed leadership strategies to varying degrees of success in the implementation of the strategic project although overall, these strategies proved successful in accomplishing the goals of the project and in evidencing my theory of action. As I think about my future
beyond residency, I ponder how I might continue to hone and utilize these leadership strategies in my future work. In the following section, I explore these implications for self in further detail as well as the implications for the site and for the sector based on this analysis of the strategic project.

**IMPLICATIONS**

In this section of the Capstone, I consider how my role, decisions and actions contributed to the project outcomes. I make connections between the analysis, the resulting successes and the challenges of the strategic project to develop implications for my progression of learning, highlight areas of growth for the site, and identify opportunities for the sector. Specifically, I share my reflections from this residency experience, describe how OCDEL should think about its future career pathways efforts, and recommend ways the early care and education sector can effectively support career advancement.

**IMPLICATIONS FOR SELF**

In the strategic project, I focused on managing the complexity, calibrating leadership, generating short-term wins, and engaging my authorizers. As I consider my future leadership moves, efforts, and goals, I will continue to further refine and utilize these strategies since they proved to be successful in the strategic project.

**MANAGE COMPLEXITY**

The ECE sector is replete with complex challenging issues. As I work to engage others in these challenges, I must continue to manage the complexity of the work. Therefore, I will have to embrace the disturbance, dissonance, messiness and uncertainty that is a part of all complex work. When I began my residency, my central leadership development goal was to engage with ambiguity and lead more confidently in conditions of uncertainty. In previous
leadership experiences, I have struggled with being able to do this, but I recognize that a key skill of an effective leader is to lead sometimes without information or certainty (Clampitt & DeKoch, 2001). The following reflection after a session with my executive coach early in the residency highlights my struggle with these issues:

Bob helped me to realize that it is critical for me to learn to deal better with ambiguity. My ability to deal with ambiguity will be crucial to my success as a leader. One strategy I can employ is to seek proactively for clarity so that I am not drowning in ambiguity. And I must be proactive about obtaining this information (O. Friday, personal reflection, August 18, 2017).

OCDEL provided the ideal context for me to grapple with uncertainty. Like most residents in the Ed.L.D. program, I entered residency uncertain of my role and level of authority in the organization. My uncertainty became even more pronounced when, three weeks into my residency, the deputy secretary, my main authorizer in the work, left the organization. I found myself with no strategic project and no one to advocate for my capabilities. Additionally, there was also uncertainty in the organization given OCDEL’s new priority initiatives, which included the Integration Initiative and Keystone STARS Re-visioning. However, in this context I was able to accomplish meaningful work with my team.

In my future leadership endeavors, I will more readily accept uncertainty as part of the process of engaging in complex work. I will assume a learning stance as a way to grapple with uncertainty the uncertainty and channel that learning into meaningful engagement with my team. I also will not be afraid to experiment more in my leadership. Clampitt and DeKoch write that leaders should “think like a sailor” and embrace the zigzag approach to leadership that counsels us to quickly change course when the environment changes. The authors note, “[Sailors’] objectives don’t change but how they get there does. Thus the sailor’s mind-set, by
necessity, is one that embraces uncertainty” (p. 132). For me this means letting go of the expectation that I will have all of the answers, indeed that I will even know all of the questions, and instead embrace what Clampitt and DeKoch (2001) call the “peculiar magic of uncertainty” (p.108).

**CALIBRATE LEADERSHIP**

In the strategic project, my reflective leadership practice was a significant contributor to my ability to calibrate to the team. Reflection comes quite naturally to me. I am a highly self-aware person so reflection is something I do constantly, and at times, I take that ability for granted. I was not always aware of how powerful a tool it was in my leadership practice. In the future, I need to focus not only on conducting personal reflections but also on how I can strategically use reflective leadership practices throughout my work. Castelli (2016) summarizes the practices of reflective leaders that I present as a table in Table 3. Although I exhibited some of these practices in the strategic project such as having consistent behavior, showing integrity, actively listening and recognizing blind spots, there are some characteristics that I can further develop such as, being a better relationship builder and providing more positive reinforcement.

<table>
<thead>
<tr>
<th>Component of Reflective Leadership</th>
<th>Characteristics</th>
</tr>
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| 1. Creates a safe environment that promotes trust | - Consistent behavior  
- Serves as a role model  
- Relationship builder  
- Values opposing views  
- Shows integrity |
| 2. Values open communication | - Open door policy  
- Displays transparency  
- Active listener/empathetic  
- Welcomes constructive criticism  
- Credible communicator |
| 3. Connects work to organization mission | - Describe the task impact on the mission  
- Explain how tasks contribute to goals  
- Relate work to company objectives  
- Acknowledge contributions  
- View work as purposeful |
| 4. Builds self-esteem and confidence | - Are viewed as trustworthy |
In my future leadership endeavors, I will seek roles that will stretch my knowledge and understanding. According to the StrengthsFinder 2.0 assessment (Rath, 2007), being a learner is one my strongest leadership traits. The description of that strength reads, “You love to learn. […] whatever the subject, you will always be drawn to the process of learning. The process, more than the content or the result, is especially exciting for you. You are energized by the steady and deliberate journey from ignorance to competence” (p.133). Although I agree that I love to learn I have not always embraced learning as part of my leadership endeavors. I viewed the process of learning with anxiety and trepidation because of my desire to appear competent and knowledgeable about the topic. However, after this residency experience I have learned that leadership is not necessarily about the knowledge of the content, although that is certainly helpful, rather it is about the process of learning and engaging others in a learning journey that produces meaningful results. In the future, I will continue to seek out leadership opportunities where I do not necessarily know the content but where I can be engaged in a learning process. The StrengthsFinder 2.0 assessment counsels me to “As far as possible, shift your career toward a field with constantly changing technologies or regulations. You will be energized by the challenge of keeping up” (Rath, 2007, p.135). Thankfully, the early care and education field
is replete with changing regulations, policies and procedures making it the ideal field for me to work in.

**CREATE SMALL WINS**

In the strategic project, I saw that generating small wins and celebrating my team’s achievements promoted morale and supported commitment to the work group. In the future, I will take time to pause and celebrate even in the midst of urgency and work. My leadership style is to focus on the execution of the task and not celebrate the accomplishment but it is important for team morale to celebrate and acknowledge the contributions and accomplishments of others. As I continue to hone my reflective leadership practice skills, I will pay particular attention to providing positive reinforcement to my colleagues.

**ENGAGE AUTHORIZERS**

Through the strategic project, I realize that I must always be cognizant of engaging my authorizers in the work. By engaging those who can legitimize the work and support its efforts through the provision of resources, including time, talent and treasure, I can situate the work in the greater context of the organization, create buy-in and validation, and ultimately set it up for success. Work is both a functional task and a political task and relationships are key to political engagement. Consequently, I will need to spend as much time on cultivating relationships as I do on executing tasks, and reframe my thinking from *work as task* to *work as task and relationships*. When I began the residency, I was intentional about meeting with all members of the leadership team as part of my entry plan to learn about their work and the work of the organization. Moving forward, I will also need to continue to structure on-going intentional engagements with my authorizers.
IMPLICATIONS FOR SITE

The Career Pathways Work Group is a model for how OCDEL can continue its integration efforts and adopt a systems approach to address complex issues. The work group is an example of a goal-oriented, strategic endeavor takes time to plan, strategize across organizational units and work streams, and set a common vision for the work. If OCDEL institutionalizes this way of working together it will set a powerful tone for how the organization does work moving forward. Members of the work group have expressed initial interest in engaging in the future strategic planning and system monitoring processes. I outline four recommendations below that OCDEL should do to support and prioritize the Career Pathways Work Group:

1. Publicly communicate the value of the Career Pathways Work Group and its deliverables, including the revised career ladder;

2. Identify new leadership to lead the work group;

3. Situate the Career Pathways Work Group as an ongoing, formal work engagement structure in the organization; and

4. Integrate the new career ladder into the Child Care and Development Fund (CCDF) State Plan.

1. PUBLICLY COMMUNICATE VALUE OF THE WORK GROUP

The Deputy Secretary and other key leadership such as the BELS Director must communicate the value of the new career ladder and the work group to both internal OCDEL staff and to external stakeholders. Leadership must also communicate how the office will use the outputs of the work group, in particular the new career ladder, to drive the workforce development efforts of the state. Some examples of these communications include an announcement in the deputy secretary’s monthly e-newsletter; a special announcement to the
field mentioning the new career ladder; a session at the annual Early Learning Summit to discuss the career ladder and the forthcoming career pathway strategic plan; and integration into the Keystone STARS communication plan.

Additionally, a subcommittee of the statewide Early Learning Council (ELC) should support and guide the work of the internal organizational team. This advisory body should include representation from early care and education employers and higher education. Engaging an external advisory group will give additional credibility to OCDEL’s career pathways efforts and provide another public mechanism to promote the importance of career pathways.

2. IDENTIFY NEW LEADERSHIP

OCDEL leadership should identify a new staff position to coordinate the work group and manage the development and ongoing implementation of the career pathway strategic plan. This person would work with higher education to identify and support local career pathway initiatives, launch more local initiatives based on promising practices, seek additional funding to support these innovative programs and strategies, and be a touch point for localities that are doing or thinking of implementing ECE career pathway programs. The Career Pathways Director would work internally to coordinate the efforts of OCDEL staff in accordance to the career pathway strategic plan and work externally with community partners, including training organizations and higher education institutions, to support career pathways programs. This person would also support the ongoing monitoring of the career pathway system including the collection of workforce evaluation metrics.
3. **Situate the Career Pathways Work Group as an Ongoing, Formal Work Engagement Structure in the Organization**

   The Career Pathway Work Group is an example of how OCDEL’s internal staff and key associated partners should work together to address complex issues in a coordinated, strategic manner. As OCDEL moves to the implementation of the recommendations outlined in the Integration Initiative increasingly it will be tackling complex issues that cross functional areas. To convey the centrality of career pathways to the work of OCDEL the group’s name should not include “work group” which connotes a temporary, time-bounded endeavor. Instead, call the group the Career Pathways Team. The team should also have meetings that are more frequent so that there is more time for strategizing and constant and consistent monitoring of the work occurs. The transition to new leadership presents a good time to evaluate the team’s membership and add new members. In particular, there is currently no representation from the Bureau of Subsidy Services on the team even though this bureau engages with many child care providers.

4. **Integrate Career Ladder Into the CCDF State Plan**

   The Child Care and Development Fund preprint for state plans calls for states to demonstrate how they “provides for a progression of professional development reflecting research and best practice […]” (U.S. Administration for Children and Families, p. 122). The language in Part 6.1.2 of the Pennsylvania CCDF State Plan should reflect the new career ladder. This would clearly and publicly articulate OCDEL’s commitment to the career pathway approach. Inclusion in the State Plan would reinforce the importance of moving practitioners to higher levels of quality and the centrality that the career ladder serves as the guide to the organizations’ efforts to support that progression. The revised language for section 6.1.2. should state:
The Pennsylvania Early Care and Education Career Ladder was created by an OCDEL workgroup in 2017 that included representatives from all bureaus of the Office of Child Development and Early Learning, the Pennsylvania Key and Early Intervention Technical Assistance. The Early Care and Education Career Ladder articulates a pathway of professional progression that can guide a practitioner’s selection of educational and training opportunities and serves as a framework for career planning decisions. The career ladder also serves as a guide for OCDEL’s strategy for workforce development and represents the state’s vision for the profession.

The Career Ladder encompasses the High School diploma/GED level through the Doctorate Level (Ph.D/Ed.D). The Career Ladder defines educational qualifications required at each level. To meet professional development standards specified in Keystone STARS, individuals working in child care centers, group child care homes or family child care homes must be in the progress of attaining the career level benchmarks on the career ladder or have achieved those benchmarks. Required staff qualifications and placement on the ladder increase as programs attain higher STAR levels.

Although the end of the strategic project for the purposes of this Capstone ended, I will stay with the organization through June 2017. I will continue to meet with OCDEL leadership staff, in particular the deputy secretary, to discuss and generate buy-in for the recommendations I stated above. I will also continue to engage the team in executing its next steps and deliverables that include a higher education and training inventory, a gap analysis, and a strategic action plan. My goals in engaging the team in these next steps are to create momentum to move the work forward before my departure and to set up the team up for future success and longevity in honor of the hard work we began.
IMPLICATIONS FOR SECTOR

The early care and education field needs intentional, meaningful paths to increased qualifications, more meaningful competencies and increased compensation. Career pathways provide a viable approach to help states articulate clear routes to career advancement as well as how to design and provide supplemental supports. ECE programs have a wide range of qualification requirements, so clear career pathways would help establish a common understanding of what each career role requires. My work in the strategic project and its outcomes leads me to recommend the creation of national early care and education career pathways and the implementation of a national licensing examination for aspiring ECE practitioners.

NATIONAL ECE CAREER PATHWAYS

We need national models of career pathways for all ECE practitioners regardless of the program-funding source. There should be different pathways for family child care providers, center-based staff and school-age program staff given the differences in their work. The connections between these three pathways and the routes to transverse them should certainly be articulated. Pathways should be based on job function, not on the program-funding source. For example, the career pathway for a Head Start teacher should be the same as that of a preschool teacher since they provide the same function to children of the same ages even though they are funded differently.

The National Association for the Education of Young Children is currently engaged in a Power to the Profession initiative that seeks to define the early care and education field of practice and develop a national consensus regarding staff qualifications and career

14 “Power to the Profession is a national collaboration to define the early childhood profession by establishing a unifying framework for career pathways, knowledge and competencies, qualifications, standards and compensation.” See: https://www.naeyc.org/profession
advancement. A national career pathway or pathways model should result from this effort along with the commitment of all participating partners to align to the national pathways. National career pathways would compel states to raise their licensing qualifications to align in order to be more competitive. Practitioners would know how they could transfer their skills and qualifications to other states.

**NATIONAL ECE LICENSING EXAMS**

Early care and education should have national licensing exams for practitioners aligned to an early care and education certification. These licensing exams, which are a part of other professions such as nursing, allow the profession to determine the barrier of entry into the field. The license should apply to practitioners who serve children ages birth through eight in any setting. There should be separate exams for assistant teachers, teachers and family child care providers. These licensing exams would be separate from the various state teaching credential exams. Ideally practitioners could take either the national license exam or the state teaching certification exam and both would be recognized for a given educator role regardless of program setting. A group such as the National Association for the Education of Young Children, the National Early Childhood Program Accreditation, or the Council for Professional Recognition could develop and administer this exam. State child care licensing and state preschool regulations would require the exam as part of the staff qualifications requirements. These increased requirements should be grandfathered into the system so that current practitioners are not penalized for meeting the higher requirement.

The nursing industry uses the National Council Licensure Examination (NCLEX) exam as its entry-level exam for nurses. There are two exams, the NCLEX-RN for Registered

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15 See: [https://www.naeyc.org/](https://www.naeyc.org/)
16 See: [http://necpa.site-ym.com/](http://necpa.site-ym.com/)
17 See: [https://www.cdacouncil.org/](https://www.cdacouncil.org/)
Nurses and the NCLEX-PN for Vocational or Practical Nurses. The NCLEX was developed by the National Council of State Boards of Nursing (NCSBN), which includes the membership of every state board of nursing. Even though states have their own nursing certification processes, they all align to a national nursing career pathway. Resources such as the Nursing License Map provide detailed guidance for people seeking to become nurses. These resources outline the career pathway, state-specific requirements, information about the NCLEX, and regional salary data.

THE PIPELINE CHALLENGE

The ECE field spends a lot of effort strategizing about ways to increase the qualifications of practitioners in the field because the floor for entry is low. However, it must also work to recruit new, highly skilled, entrants to the field. A key strategy is educating high school students about the value of early education practice and routing them onto the career pathway from the very beginning of their careers. The work of Educators Rising and its high school initiative provides a good example for our field. Through student clubs led by partner teachers, high school students explore the teaching profession and earn micro-credentials or digital badges to demonstrate their increasing competencies. Participants also compete in national competency competitions and have access to resources including scholarship to continue their training.

There is certainly a paradoxical aspect to the career pathway challenge. It is difficult to incentivize practitioners to enter the field or obtain increased credentials and meet higher qualifications when they cannot expect increased compensation as a result. Still, it is hard to

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18 See: https://www.ncsbn.org/index.htm
19 See: https://nursinglicensemap.com/
20 Starting in high school, Educators Rising provides passionate young people with hands-on teaching experience, sustains their interest in the profession, and helps them cultivate the skills they need to be successful educators. Visit https://educatorsrising.org/ for more information.
advocate for increased compensation for child care practitioners if they do not meet higher qualifications. I recognize this challenge and unfortunately, the increased qualifications will need to come before the increased compensation. This is a bitter pill that the sector has to swallow if we are to be viewed as a viable profession, one that does critical work in our society and merits commensurate compensation and respect.

CONCLUSION

I began my strategic project excited about the prospect of leading a team to focus on career pathways and the aligned workforce development supports in the state. At the time my project started, OCDEL was considering more ways to effectively and efficiently serve its clients. The organization’s considerations included integrating work across its siloed bureaus, thinking more strategically about its work and eventually—if it settled on and agreed to certain recommendations—moving into the implementation stage of change processes. I believed that my strategic project and the Career Pathways Work Group, which represented perspectives from across the agency, could be an example of how the organization plans for and executes strategy to address complex issues.

Beyond the impact to OCDEL’s processes, I was also excited about the value and impact of the group’s work. I was less interested in developing the actual tool—the career ladder—and more interested in engaging the team in vision-setting for the field, creating clear milestones and benchmarks for the field and finally clarifying the state’s strategy to effect the vision and hold the system accountable. I knew that OCDEL was engaged in several workforce development efforts; however, there was no overarching strategy. At least, the strategy was not clear to me as a newcomer to the organization, and so I imagined it was less clear to those outside the organization.
The strategic project was successful. Not only did the team articulate its vision of workforce advancement through the visual depiction of the career ladder, I also led the team in developing additional deliverables that would serve to promote a future strategic planning process of creating a coherent, comprehensive plan to guide the organization’s work on meeting those goals. In my leadership, I managed the complexity of the work by scaffolding the team’s engagement and grounded its work in a vision. I also calibrated my leadership moves to the state of the team by leveraging my reflection and learning skills, generated short-term wins with the use of discrete deliverables, and I engaged my authorizers to gain legitimacy and support of the work.

I leave this residency experience with new learning and insight into the role of state government in early care and education. I also leave residency with a deeper appreciation for the people who work in state government. They have a strengthened my belief in public institutions. My colleagues in the Career Pathways Work Group and at OCDEL continually inspired me with their dedication to the field, their commitment to best serving children and families, and their tenacity in the face of challenge. It was an honor to lead a team of smart, driven thinkers and doers. I am proud of the work we did together and I believe it will have a long-term impact on the organization.
BIBLIOGRAPHY


APPENDIX A - OCDEL ORGANIZATIONAL CHART

The Pennsylvania Office of Child Development and Early Learning supports families and their children, from prenatal through school age, by using data, research and stakeholder guidance to assure high quality services.

Proud to be a Race to the Top – Early Learning Challenge Partner.
Now is an exciting time for the Office of Child Development and Early Learning!

How is it possible that...

Pennsylvania increases access to high-quality early learning services?

Government works better for families and early learning providers?

**Vision**

The Pennsylvania Office of Child Development and Early Learning supports families and their children, from prenatal through school age, by using data, research and stakeholder guidance to assure high quality services.

**Mission**

The Office of Child Development and Early Learning (OCDEL) provides families access to high quality services to prepare children for school and life success.

**Goals**

- Work effectively, collaboratively, creatively and successfully to ensure that all families have access to high quality programs for their children.
- Engage stakeholders in actionable ways that provide guidance on programs and policies.
- Identify and use key data and research to improve policies and practices.

**Priority Initiatives**

- Integrating and Aligning OCDEL Services
- Keystone STAR 2 Re-visioning
- Supporting the Early Childhood Education Workforce
- Reducing Expulsion/Suspension and Promoting Inclusion in Early Childhood
- Building Capacity for High-Quality Early Learning Services
- Child Care and Development Block Grant Reauthorization

The result: Better outcomes for our young children and their families!
## APPENDIX C – KEYS TO QUALITY CAREER LATTICE

### CAREER LATTICE LEVEL

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIII</td>
<td>Ph.D/ Ed.D in: ECE/ equivalent degree OR in related field including 30 ECE credits OR any field with ECE Certification</td>
</tr>
<tr>
<td>VII</td>
<td>Master’s in: ECE/ equivalent degree OR related field including 30 ECE credits OR Elementary Ed. and 18 ECE credits OR any field with ECE Certification</td>
</tr>
<tr>
<td>VI</td>
<td>BS/BA in: ECE/ equivalent degree OR related field including 30 ECE credits OR Elementary Ed. and 18 ECE credits OR any field with ECE Certification</td>
</tr>
<tr>
<td>V</td>
<td>AA/AAS in: ECE/ equivalent degree OR related field including 18 ECE credits OR Elementary Ed. and 12 ECE credits OR unrelated degree (BS/BA/AA/AAS) including 30 ECE credits OR ASR/AST degree in ECE with articulation agreement</td>
</tr>
<tr>
<td>IV</td>
<td>30 credits including 12 ECE credits OR ASR/AST degree in ECE</td>
</tr>
<tr>
<td>III</td>
<td>Credential, Diploma, Certificate or 6 ECE credits</td>
</tr>
<tr>
<td>II</td>
<td>45 hours or 3 ECE credits (the 45 hours may include 15 hour orientation)</td>
</tr>
<tr>
<td>I</td>
<td>High school diploma/SED and 15 hours New Staff Orientation training</td>
</tr>
</tbody>
</table>

### POSITIONS

- Child Care/ School-Age Care
- Early Head Start/ Head Start
- Private Academic Schools
- Public School District
- Early Intervention
- Career/ Community Mentor
- Higher Education Faculty
- Early Childhood Teachers
- Early Childhood Classroom Teacher
- Early Childhood Service Coordinator
- Early Childhood Educator
- Early Childhood Assistant
- Early Childhood
- Early Childhood
- Early Childhood
- Early Childhood
## APPENDIX D – CAREER PATHWAYS TOOLKIT TOOLS WITH LINKS

<table>
<thead>
<tr>
<th>Tool</th>
<th>Link to Access</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Six Key Elements Readiness Assessment Tool</strong> aids states and localities in assessing their career pathways initiative in accordance with the DOL Six Elements Framework. Tool helps leaders to assess their progress and develop strategic priorities.</td>
<td>See DOL Career Pathways Toolkit: A guide to system development Section Two</td>
</tr>
</tbody>
</table>
| **Next Steps Action Planning Tool** helps a team carry out prioritized action steps identified in the Readiness Assessment Tool | Action Planning Tool with instructions [https://learnwork.workforce3one.org/view/2001120642119875739/info](https://learnwork.workforce3one.org/view/2001120642119875739/info)  
Action Planning Tool template [https://learnwork.workforce3one.org/view/2001126551586034594/info](https://learnwork.workforce3one.org/view/2001126551586034594/info) |
| **Service Mapping Tool** details partner services and activities that can be employed/leveraged and further in the career pathways system. Useful in identifying service gaps and duplication | Service Mapping Tool with instructions [https://learnwork.workforce3one.org/view/2001126552554540652/info](https://learnwork.workforce3one.org/view/2001126552554540652/info)  
Service Mapping Tool template [https://learnwork.workforce3one.org/view/2001126552554540652/info](https://learnwork.workforce3one.org/view/2001126552554540652/info) |
| **Federal Funding Toolkit** designed to help agencies identify and employ Federal resources to support career pathways efforts | [http://www.clasp.org/documents/Toolkit-pdfs/worksheet.pdf](http://www.clasp.org/documents/Toolkit-pdfs/worksheet.pdf) |

Additional tools can be found in the online Career Pathways Tools Catalog, available at [https://cpToolkitcatalog.peerta.acf.hhs.gov/](https://cpToolkitcatalog.peerta.acf.hhs.gov/)
APPENDIX E – CAREER PATHWAY VISION DRAWINGS
Career Pathways

Higher Ed
Community Colleges

Bachelor Degrees

AA Degrees

CDA Certificate Programs
<table>
<thead>
<tr>
<th>Elementary Teachers</th>
<th>Pre-K Counts matters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- New hires must have a BA like existing staff
- Keep moving to a degree and write an action plan to hire
- Stackable credentials?

- Use rising stars or Teach to get there
product
Career opportunity

what feeds?
High School Guidance towards Field (Academic Advisors, Teachers)

Enrolling in ECE Field

Into Field (Apprenticeship)

Begin as aide

Guidance from Directors / Trainers / TA / Coaches

AA

COA (through coaching/training/courses)

AA/BA

Bachelor

Master

Quality Teachers
The goal of Pennsylvania Keys to Quality Early Learning Career Pathways System is to ensure that children in Pennsylvania are educated by professionals who have achieved professional learning through the attainment of foundational and specialized knowledge pertinent to the care and education of young children. This system of professional learning is ongoing, intentional, reflective, goal-oriented, based on specific curricula and is consistent across the state.
APPENDIX G – THEORY OF CHANGE

Theory of Change
Revised 01/23/2017

IF OCDEL and its partners design and plan for a career pathways system that

• Provides supports and opportunities that enable early childhood education (ECE) professionals to navigate and advance through the early childhood education profession,

• Entails ongoing professional development opportunities and helps ECE professionals to reflect on their practice,

• Ensures that teachers are receiving the needed training,

• Emphasizes the attainment of foundational and specialized knowledge and competencies that will help increase the professional perception of the field, and

• Incorporates an ongoing evaluation system that will enable the system to monitor its effectiveness in meeting these goals,

THEN

• ECE practitioners will feel competent in their practices,

• ECE program leaders will be better able to support their staff in their professional development,

• ECE program leaders will be able to maintain viable businesses, and

• Ultimately ECE workers will be perceived as the professionals they are and be commensurately compensated.
# APPENDIX H – LOGIC MODEL

## Logic Model

**Career Pathways System (CPS)**  
March 02, 2017

<table>
<thead>
<tr>
<th>Priorities</th>
<th>Inputs</th>
<th>Outputs</th>
<th>Outcomes</th>
<th>Outcomes</th>
<th>Outcomes</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership, Coordination, &amp; Sustainability</td>
<td>Cross Agency Partnership</td>
<td>Cross-sector leadership team sets priorities and makes policy, governance and financial decisions related to the career pathways system.</td>
<td>Leadership team develops vision, mission and purpose for the career pathways system and drafts a multi-year career pathways implementation plan.</td>
<td>Career Pathways System plan articulates a process for two-way communication between stakeholders and the leadership team for collecting input and sharing information on the implementation of activities.</td>
<td>CPS plan is aligned with, and informed by, stakeholder input, national professional organization career pathways standards, state requirements, and the vision and mission of the CPS.</td>
<td>CPS services, supports programs and policies function in a coordinated manner to support the building and maintenance of a qualified workforce.</td>
</tr>
<tr>
<td>Leadership, Coordination, &amp; Sustainability</td>
<td>Identify Funding Needs and Sources</td>
<td>Written, multi-year plan addresses all aspects of the career pathways system.</td>
<td>Leadership team examines current policies and state initiatives to identify opportunities for collaboration and the coordination of resources.</td>
<td>PA Key and EITAs</td>
<td>Regional Keys and Data system developers</td>
<td>Employers, TA, Coaching Staff, Higher education partners</td>
</tr>
<tr>
<td>Leadership, Coordination, &amp; Sustainability</td>
<td>Align Policies and Programs</td>
<td>Progressive credit-bearing pathway that leads towards degrees and credentials.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leadership, Coordination, &amp; Sustainability</td>
<td>Measure System Change and Performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Logic Model

**Career Pathways System (CPS)**

<table>
<thead>
<tr>
<th>Priorities</th>
<th>Inputs</th>
<th>Outputs</th>
<th>Outputs</th>
<th>Outputs</th>
<th>Outcomes</th>
<th>Outcomes</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engage Employers</td>
<td>CKC – higher education coursework alignment grants.</td>
<td>Develop PD pathways and support in partnership with higher education partners.</td>
<td>Program Administrators (Centers and Home-based)</td>
<td>Graduates of present VOS programs exhibit relevant knowledge and competencies.</td>
<td>Teacher certification and all other early childhood certifications are competency or skill-based.</td>
<td>Increased compensation of ECE professionals.</td>
<td></td>
</tr>
<tr>
<td>Design Education and Training Programs</td>
<td>CKC that is aligned to QM Transforming the Workforce report.</td>
<td>Review CKC annually and update when appropriate, to reflect state personnel needs, changes in legal requirements, changes in NAEYC standards, evaluation data and knowledge of evidence-based practices.</td>
<td>Teachers (Center and Home-based) TA and coaching professionals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Align Policies and Programs</td>
<td>CKC and PK – 4 Certification requirements are accessible.</td>
<td>Align CKC across early childhood and early intervention personnel standards.</td>
<td>Higher Education Partners</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measure System Change and Performance</td>
<td>All workforce competencies are accessible and aligned.</td>
<td></td>
<td>Professional Development System Administrators</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Employers</td>
<td></td>
<td></td>
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</table>
# Logic Model

## Career Pathways System (CPS)

### March 28, 2017

<table>
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<tr>
<th>Priorities</th>
<th>Inputs</th>
<th>Outputs</th>
<th>Outputs</th>
<th>Outcomes</th>
<th>Outcomes</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preservice Personnel Development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Cross Agency Partnership</td>
<td>T.E.A.C.H. Scholarships / Rising STARS Tuition Assistance</td>
<td>Survey IHEs for ECE and EI educational and training offerings</td>
<td>High School/ CTE Students</td>
<td>IHE programs and curricula for ECE are coordinated to ensure an adequate number of programs of study are available to meet current and future personnel needs.</td>
<td>Increase in the number and types of high-quality early childhood education practitioners.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Student Advising</td>
<td>Develop a statewide, common ECE course catalog and numbering system</td>
<td>College students</td>
<td>Students seamlessly transition from community colleges to 4 yr IHE</td>
<td>Increase in diversity of early childhood education practitioners.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Support for non-traditional students</td>
<td>Create policies and programs to support induction and apprenticeships.</td>
<td>Higher education partners</td>
<td>CTE programs offer 9 credit CDA</td>
<td>Certification staff requirements align to career ladder.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Offer more online coursework and credit-bearing CDA's.</td>
<td></td>
<td></td>
<td>Increased # students entering and persisting through ECE degree programs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Develop statewide articulation agreements between two year and private four year IHEs.</td>
<td></td>
<td></td>
<td>Increased compensation of ECE professionals.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Promote alternative routes to teacher certification.</td>
<td></td>
<td></td>
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</table>

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91
# Logic Model

**Career Pathways System (CPS)**

**March 06, 2017**

<table>
<thead>
<tr>
<th>Priorities</th>
<th>Inputs</th>
<th>Outputs Adults</th>
<th>Outputs Participation</th>
<th>Outcomes Short Term</th>
<th>Outcomes Medium Term</th>
<th>Outcomes Long Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-service Personnel Development</td>
<td>Registry that captures program and staff training data</td>
<td>Employers engage staff in, or direct staff to, high-quality training</td>
<td>Program Administrators (_centers and Home-based)</td>
<td>Increased participation in PD aligned to demonstrated competency needs.</td>
<td>Staff with increased knowledge, skills and competencies</td>
<td>Statewide system for personnel development is aligned with higher education, and national and state standards including Keystone STARS.</td>
</tr>
<tr>
<td></td>
<td>Progressive coaching model</td>
<td>Faculty, trainers and regional staff meet regularly to plan for and collaborate on in-service content</td>
<td>Teachers (Center and Home-based)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Personal data used to develop PD plans</td>
<td>Partner with IHEs to offer more online coursework and credit-bearing CDAs</td>
<td>TA and coaching professionals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PD employs various adult learning strategies including coaching and mentoring</td>
<td>Create ways to recognize high quality providers (e.g., awards, endorsements, certificates, etc.)</td>
<td>Higher education partners</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Families inform staff PD opportunities</td>
<td>Assessments used to inform growth and PD Plans</td>
<td>Professional development system administrators</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>PD based on evidence-based practices</td>
<td></td>
<td>Families</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Credit-bearing PD</td>
<td></td>
<td>STARS, TA, PD and referral staff</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Funding to access PD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- Staff with increased knowledge, skills and competencies
- All policies and programs support credit-bearing PD that can be articulated to higher education degrees
- Knowledge of types of PD and impact on staff competency
- Employers able to maintain viable businesses.
# Logic Model

**Career Pathways System (CPS)**

**March 06, 2017**

<table>
<thead>
<tr>
<th>Priorities</th>
<th>Inputs</th>
<th>Outputs Activities</th>
<th>Outputs Participation</th>
<th>Outcomes Short Term</th>
<th>Outcomes Medium Term</th>
<th>Outcomes Long Term</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recruitment &amp; Retention</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engage Employers</td>
<td>Promotional marketing materials highlighting the benefits of working in the sector</td>
<td>Develop early care and education marketing campaigns to promote workers entering the field.</td>
<td>High School Students</td>
<td>Increased interest in early care and education sector</td>
<td>Employers use career ladder to guide staff hiring and compensation decisions.</td>
<td>Increase in the number and types of high-quality early childhood education practitioners.</td>
</tr>
<tr>
<td>Identify Funding Needs and Sources</td>
<td>Increased funding to support education/training</td>
<td>Create multiple pathways for programs to demonstrate quality.</td>
<td>Advocates</td>
<td>More students entering ECE and early childhood education programs</td>
<td>More ECE practitioners entering the field and staying in</td>
<td></td>
</tr>
<tr>
<td>Align Policies and Programs</td>
<td>Statewide apprenticeship program</td>
<td>Create enhanced compensation strategies and ways to recognize high-quality providers (e.g., awards, endorsements, certificates)</td>
<td>Higher education partners</td>
<td>Keystone STARS indicators align to career ladder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measure System Change and Performance</td>
<td>Comprehensive recruitment and retention strategies</td>
<td>Develop induction, mentoring models, and other supports.</td>
<td>Training partners</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tracking of recruitment/retention strategies</td>
<td>Increase articulation agreements between two and four-year IHEs</td>
<td>Employers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Promote alternative routes to teacher certification.</td>
<td>Keystone STARS</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<p>| | Inputs | Outputs Activities | Outputs Participation | Outcomes Short Term | Outcomes Medium Term | Outcomes Long Term |
| | | | | | | |
| <strong>Recruitment &amp; Retention</strong> | | | | | | |
| Engage Employers | Promotional marketing materials highlighting the benefits of working in the sector | Develop early care and education marketing campaigns to promote workers entering the field. | High School Students | Increased interest in early care and education sector | Employers use career ladder to guide staff hiring and compensation decisions. | Increase in the number and types of high-quality early childhood education practitioners. |
| Identify Funding Needs and Sources | Increased funding to support education/training | Create multiple pathways for programs to demonstrate quality. | Advocates | More students entering ECE and early childhood education programs | More ECE practitioners entering the field and staying in | |
| Align Policies and Programs | Statewide apprenticeship program | Create enhanced compensation strategies and ways to recognize high-quality providers (e.g., awards, endorsements, certificates) | Higher education partners | Keystone STARS indicators align to career ladder | | |
| Measure System Change and Performance | Comprehensive recruitment and retention strategies | Develop induction, mentoring models, and other supports. | Training partners | | | |
| | Tracking of recruitment/retention strategies | Increase articulation agreements between two and four-year IHEs | Employers | | | |
| | | Promote alternative routes to teacher certification. | Keystone STARS | | | |</p>
<table>
<thead>
<tr>
<th>Priorities</th>
<th>Inputs</th>
<th>Outputs Activities</th>
<th>Outputs Participation</th>
<th>Outcomea Short (1 year)</th>
<th>Outcomea Medium (3-5 years)</th>
<th>Outcomea Long (5-10 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross Agency Partnership Measurement</td>
<td>Registry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Career Pathways System Evaluation Plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Personal data linked to child and family outcomes</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Develop evaluation questions and data collection methods</td>
<td>PA Key EITA</td>
<td>CPS plan articulates a process for two-way communication between stakeholders and the leadership team for soliciting input and sharing information on the implementation of activities.</td>
<td>CPS plan is aligned with and informed by stakeholder input, national professional organization career pathways standards, state requirements and the vision and mission of the CPG.</td>
<td>CPS Evaluation Plan is continuously monitored and revised based on data</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tailor Registry to collect appropriate personal data</td>
<td>Regional Keys Data system developers Research Council Employers TA/ Coaching Staff Higher education partners</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## APPENDIX I – EARLY CARE AND EDUCATION CAREER LADDER

### PENNSYLVANIA EARLY CARE AND EDUCATION CAREER LADDER

*A career pathway for transforming the workforce of those serving children birth to school entry towards increased professional qualifications*

<table>
<thead>
<tr>
<th>DEGREE</th>
<th>SPECIALIZED KNOWLEDGE</th>
<th>CAREER ROLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School Diploma or Equivalency</td>
<td>Child Development Associate (CDA)</td>
<td>AIDE</td>
</tr>
<tr>
<td></td>
<td>FCC Child Development Associate (CDA)</td>
<td>FAMILY CHILD CARE PROVIDER</td>
</tr>
<tr>
<td>AA/AAS in ECE or equivalent degree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AA/AAS in any field</td>
<td>Child Development Associate (CDA)</td>
<td>ASSISTANT TEACHER</td>
</tr>
<tr>
<td>BS/BA in ECE or equivalent degree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BS/BA in any field</td>
<td>CDA or PK-4 Instructional Certification</td>
<td>TEACHER</td>
</tr>
<tr>
<td>Requirement for TEACHER</td>
<td>3 years Relevant Experience*</td>
<td>MASTER TEACHER ASSISTANT DIRECTOR</td>
</tr>
<tr>
<td></td>
<td>Director Credential**</td>
<td>DIRECTOR</td>
</tr>
<tr>
<td>MA in ECE or equivalent degree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Requirement for COACH</td>
<td>3 years Coaching Experience</td>
<td>MASTER COACH</td>
</tr>
<tr>
<td>Ph.D./ Ed.D. in ECE or equivalent degree</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ECE = Early Childhood Education  
FCC = Family Child Care  
A list of approved degrees equivalent to an ECE degree without teacher certification, can be found at [www.pakeys.org](http://www.pakeys.org) under Career Development/Requirements  
* Relevant experience will depend on the role.  
** The Director’s Credential will be revised in 2017 to reference a dual track.