Effective Investments
In the Child Care and Early Education Profession

Executive Summary

Roberta B. Weber, Ph.D.
Molly Trauten, M.G.S.
Acknowledgments

This paper was commissioned by The Oregon Community Foundation. The views expressed are those of the authors and not necessarily those of the Foundation.

We wish to acknowledge the contributions of the Advisory Committee, which guided the project team and reviewed a draft of the paper. Names and organizational affiliations of the members of the Advisory Committee are listed in Appendix A. We thank them for sharing their knowledge and insights.
Effective Investments in the Child Care and Early Education Profession

A Review of the Research Literature

Executive Summary

In Oregon, as in the rest of the United States, the majority of young children will spend a substantial amount of time in nonparental care before they enter kindergarten (Oregon Child Care Research Partnership, 2007; Overturf Johnson, 2005). Increased awareness of the impact of child care and early education on the development of young children has brought attention to the professional development of those who teach and care for them. The skill and stability of teachers and caregivers are critical factors that influence how well child care and early education experiences meet the needs of young children.

Efforts to strengthen the child care and early education workforce must start with an understanding of the members of the workforce itself. The workforce comprises two groups: teachers, who typically work in child care centers, and caregivers, who typically work in homes. In Oregon, the teacher/caregiver workforce numbers approximately 14,500 (Child Care Division, 2005). Across the nation, this workforce is characterized by rates of low compensation, high turnover, and steadily decreasing levels of education (Whitebook, Sakai, Gerber, & Howes, 2001; Bellm & Whitebook, 2006; Children’s Institute, 2008). At the same time that education levels within the workforce have declined, the skills needed to meet the needs of young children have risen due to increasing levels of social-emotional and behavioral problems as well as cultural and linguistic diversity.

Child outcomes are inextricably connected to adult-child relationships. For young children in early childhood settings, interactions with teachers/caregivers are the “primary mechanism” through which experiences affect the child (Pianta, 2006, p.233). Within the profession, the amount of sensitivity to children’s needs and involvement with them is linked with higher levels of education (Burchinal, Cryer, & Clifford, 2002; Clarke-Stewart, Vandell, Burchinal, Marion, & McCartney, 2002). From parents to researchers, there is agreement that warm, nurturing, and stimulating interactions between teachers/caregivers and children is the single most important predictor of positive child outcomes from child care and early education (Emlen, Koren, & Schultze, 2000; Shonkoff & Phillips, 2000). However, underneath this consensus are policy questions about the type, content, and amount of investment in professional development needed to make a difference in children’s lives.

Recognizing the value of using research to inform policy-making, The Oregon Community Foundation (OCF) commissioned Oregon State University to review the research literature on professional development of the child care and early education workforce. OCF articulated questions whose answers can support public and private investment decisions. The questions fell into four categories:

- professional development;
- articulation across types of professional development;
- scholarship, compensation, and retention initiatives; and
- integration of OCF Scholarship Programs with Oregon’s Child Care and Early Education System.

The major research findings from a review of the literature are organized by these categories. OCF’s questions introduce each section.

Professional Development

What is known about the impact of professional development on teacher behavior and child outcomes?

Three primary factors are positively associated with teacher quality: compensation, participation in professional development, and stability...
Compensation appears to be the strongest predictor of classroom quality in child care centers (Kagan et al., 2006). Professional development encompasses education, training, and related activities. Most of the related activities involve individualized instruction and are sometimes described by the term relationship-based professional development (RBPD) (National Child Care Information and Technical Assistance Center [NCCIC], 2008d). Over the last thirty years, researchers have sought to identify relationships between professional development and one or more of three outcomes: program quality; provider knowledge, skills and attitudes, and child outcomes. Program quality, teacher/caregiver outcomes, and child outcomes are inextricably linked.

Research on the impact of professional development has been challenged by a lack of agreement on definitions and measures (Maxwell, Feild, & Clifford, 2006); methods and designs ill equipped to produce high levels of confidence in findings; small study samples from which findings cannot be generalized (Zaslow & Martinez-Beck, 2006); and a frequent focus on center-based preschools to the exclusion of other types of care or other age groups (Fiene 2002, 2003). Despite these and other limitations, research has consistently suggested that higher levels of provider education and training, particularly that which is child-specific, predict program quality in child care settings (Arnett, 1989; Cost, Quality, and Child Outcomes Study Team, 1995; Howes, Whitebook & Phillips, 1992; National Institute of Child Health and Human Development, Early Child Care Research Network [NICHD ECCRN], 1996; Vandell & Wolfe, 2000; Whitebook, 2003b).

Research indicates that both education and training are associated with more positive and stimulating teacher/caregiver behavior and positive child outcomes. Education and training that increases positive interactions between adults and children affects multiple areas of development (Pianta, 2006; Ramey et al., 2008). Earlier research has shown evidence of a relationship between a bachelor’s degree and positive outcomes, but more recent studies indicate that a bachelor’s degree may not have greater impact on classroom quality or child outcomes than less education and/or training (Blau, 2000; Early et al., 2006; Early et al., 2007; Kontos & Wilcox-Herzog, 2003). The new studies do not negate the observed associations between education and positive outcomes; rather, they raise questions about the cause. Other factors, or other factors interacting with a bachelor’s degree, may cause the positive outcomes.

Intensive, continuous, and individualized training appears more likely to change teacher/caregiver behavior than short-term workshops (Bowman, Donovan, & Burns, 2000; Fukkink & Lont, 2007). Training effects are strongest when training content is clearly specified and the focus is clear (Arnett, 1989; Layzer, Layzer, Goodson, & Price, 2007; Fiene, 2003; Pianta, Mashburn, Downer, Hamre, & Justice, 2008; Bromer, Van Haitsma, & Modigliani, 2008).

Models of RBPD (mentoring, coaching, consulting, technical assistance, and staffed family child care networks) appear to be a potent tool for behavior change, especially when delivered with training or education (Bromer et al., 2008; Bryant, 2008; Dickinson & Caswell, 2007; Fiene 2002, 2003; Layzer et al., 2007; Pianta et al., 2008; Raver et al., 2008). Practicums, long a part of college teacher training programs, are another form of RBPD. New studies have shown the effectiveness of intensive, job-embedded modes combined with training or education (Bryant, 2008; Pianta et al., 2008; Ramey, Ramey, Timraz, Grace, & Davis, 2008).

The behavior of teachers/caregivers appears to be associated with characteristics of the facility in which they are employed. The likelihood of behavior change increases when interventions focus on the whole facility as well as teachers/caregivers and involve RBPD in combination with education and/or ongoing training (Dickinson & Caswell, 2007; Worcel & Green, 2008). The type of care in which a person is employed may affect which training strategies are the most effective (Marshall et al., 2001; Marshall et al., 2002; Marshall, Creps, Roberts, Glantz, & Robeson, 2004; Worcel & Green, 2008). Increased compensation is positively associated with retention, and combining compensation with education and training appears likely to increase the skill and stability of the child care and early education workforce.
Professional development can result in changes in attitude and behavior as well as increases in knowledge among diverse members of the child care and early education workforce. Not all training has shown such impact, but researchers have identified characteristics that increase the likelihood of improved training outcomes. Characteristics that are associated with more positive outcomes include training that is:

- intensive (Bromer et al., 2008; Fiene, 2002, 2003; Ramey et al., 2008; Raver et al., 2008);
- continuous or ongoing (Layzer et al., 2007; Raver et al., 2008);
- individualized—sometimes accomplished by embedding the training in the person’s job (Bryant, 2008; Dickinson & Caswell, 2007; Fiene, 2002; Layzer et al., 2007; Pianta et al., 2008; Ramey et al., 2008);
- inclusive—involves the teacher’s/caregiver’s supervisor in the training (Dickinson & Caswell, 2007; Layzer et al., 2007; Pianta et al., 2008; Ramey et al., 2008);
- focused—covering specific content rather than a general range of topics (Bryant, 2008; Fiene, 2002; Layzer et al., 2007; Pianta et al., 2008; Ramey et al., 2008).

RBPD encompasses multiple forms of professional development that focus on the establishment of relationships between more and less skilled members of the child care and early childhood education workforce. Mentoring is one type of RBPD. We use the term mentor to encompass related coach, consultant, or network staff. In addition to characteristics found to increase effectiveness of any type of training, there are characteristics of effectiveness specific to RBPD that relate to the mentors, including:

- hiring highly qualified mentors (Bromer et al., 2008; Ramey et al., 2008);
- providing training and ongoing support of mentors (Layzer et al., 2007; Ramey et al., 2008);
- assigning manageable mentor or coach caseloads—successful programs shared low ratios of mentors to mentees but a definite ratio has not been identified (Bromer et al., 2008; Bryant et al., 2008; Ramey et al., 2008); and
- focusing mentor training directly on the knowledge and behavior being addressed (Bromer et al., 2008; Bryant et al., 2008; Layzer et al., 2007; Pianta et al., 2008; Ramey et al., 2008).

Education and training have both been shown to increase knowledge and improve attitudes. RBPD, when combined with education or training, has proven to be an effective tool in helping teachers/caregivers apply knowledge and actually change behavior, thus increasing program quality and improving child outcomes.

**Articulation Across Types of Professional Development**

**What strategies have successfully linked training and education in ways that encourage and support attainment of certificates, credentials, and degrees by members of the child care and early education workforce?**

As noted above, the child care and early education workforce is characterized by low wages and decreasing levels of education. Yet, education and training have been shown as key to improving program quality and child outcomes. Efforts to encourage and support increased education of this workforce have been hindered by the inability of teachers/caregivers to use knowledge gained through training to earn degrees; in other words, to translate training hours and credentials into college credits. A number of strategies have been shown to be effective in terms of linking training hours and college credits in order to encourage and support the movement of members of the child care and early education workforce from training hours to college degrees.

The creation of training certificate programs that earn college credits and meet training hour requirements provides a promising strategy. These certificates have the added benefit of having characteristics of effective training that the current collection of workshops that meet training requirements do not. Maine and Tennessee provide examples of training programs that meet training requirements and are eligible for college credits.
for college credits. The Maine Roads Core Knowledge Training program provides training that meets training requirements for state licensing, the Child Development Associate Credential (CDA), and ongoing professional development (see http://muskie.usm.maine.edu/maineroads/pages/ckt.htm). It is also possible to receive college credit for completion of the entire sequence through the University of Maine or community colleges. Tennessee partners have also created a certificate program for which students enrolled in higher education can earn college credit (see http://www.tecta.info/what.htm for a full description of the certificate).

Both of these programs represent a high level of collaboration between higher education and state child care agencies. A number of Oregon community colleges have training certificate programs (see http://www.oregon.gov/EMPLOY/CCD/GAS/10.7FusionChart.pdf for a list of college offerings) that award credit, but Oregon has no system or statewide program.

Another strategy being employed in Oregon and elsewhere involves granting college credits to college students for achievement of a CDA or a step on the Oregon Registry. A number of Oregon community colleges currently use this strategy (see http://www.oregon.gov/EMPLOY/CCD/Virtual_Degree_Program.shtml for a list of colleges that grant credit to enrolled students). Again, Oregon has no statewide strategy.

Both Maine and Tennessee have developed statewide articulation agreements between community colleges and four-year colleges and universities as well as their child care regulatory agency. In Oregon, local articulation agreements are negotiated between some community colleges and some four-year schools. The content of articulation agreements vary, negotiations are complicated and time-consuming, and agreements frequently do not cover all relevant issues. A statewide agreement that addresses issues related to vocational–professional credits as well as transfer credits, and to acceptance of credits to meet department degree requirements, would greatly enhance movement of the workforce from training hours to degrees.

The most effective strategy for supporting professional development of the child care and early education workforce would be statewide and comprehensive. It would involve all training and education partners and have as its goal statewide agreement on transferability of CDAs, Steps on the Oregon Registry, and training certificates into college credits that could be used in obtaining college degrees in early childhood education or child development. Currently, the burden for getting credit for prior work is borne almost entirely by the individual teacher/caregiver. As has been done in Maine and Tennessee, a group of education and training partners could create an articulated system of training and education, including the redesign of child care–required training into training that has the effective characteristics previously outlined and is also eligible for college credits. Such training would facilitate movement towards degree achievement.

Scholarship, Compensation, and Retention Initiatives

What is known about the impact of scholarship programs and training, compensation, and retention initiatives?

Compensation appears to be the strongest predictor of classroom quality in child care centers (Cost, Quality and Child Outcomes Study Team, 1995; Kagan et al., 2006; Phillips, Mekos, Scarr, McCartnery, & Abbott-Shimm, 2000; Whitebook, Howes, & Phillips, 1990). In addition, studies have found that compensation is directly associated with teacher retention (Whitebook & Sakai, 2003). Scholarship programs have not been rigorously evaluated in isolation in order to determine their impacts. Evaluations of scholarship programs linked with compensation and retention initiatives have proved that this combined strategy is successful at getting members of the child care and early education workforce to move to higher levels on their state registries and/or to complete college certificates and degrees (Park-Jadotte et al., 2002; Whitebook & Bellm, 2004). They have successfully engaged both center teachers and family child caregivers, although participation rates appear to be higher among center teachers (Park-Jadotte et al., 2002). All evaluated programs have demonstrated improvement of participants’ retention in their positions. Another lesson learned from
Are there ways to use the scholarship programs to strengthen particular types of care such as “Friend, Family and Neighbor” care and/or infant-toddler care or others?

Oregon has accessible education, training, and mentoring, but all are constrained by inadequate resources. Oregon delivers training and mentoring in communities across the state through its child care resource and referral (CCR&R) system. Early childhood college courses are offered by 16 of Oregon’s 17 community colleges and through a virtual degree program that allows members of the child care and early education workforce to pursue an associate’s degree via online courses from anywhere in the state. In addition to education and training delivery, Oregon has two key resources. The Oregon Center for Career Development in Childhood Care and Education leads policy setting on standards and assessment of competency levels for members of the child care and early education workforce, and OCF’s John and Betty Gray Scholarship Programs reduce financial barriers to education and training throughout the state.

Research indicates that improvements in the skill and stability of the child care and early education workforce requires a multi-pronged approach that recognizes that expectations and requirements, access to professional development, and compensation interact to affect the skill and stability of the workforce. For example, efforts to improve the quality of Oregon’s child care and early education workforce would have the highest chance of success if they include a coordinated effort that recognizes that improving child outcomes requires investing in members of the workforce and the programs in which they work.

Viewing Oregon’s quality improvement initiatives as parts of a coordinated effort to improve the quality of child care and early education in Oregon has the potential to increase the impact of each effort. For the Scholarship Programs, three collaborative efforts are relatively easy to accomplish:

1. Support efforts to increase professionalization and accountability by requiring certification in the Oregon Registry as an eligibility requirement in the Scholarship Programs.

Integration of Oregon Community Foundation Scholarship Programs into Oregon Child Care and Early Education System

How do we make sure that the scholarship programs interface with and reinforce other parts of the system Oregon is building, such as the Oregon Registry, statewide child care mentors, and the Quality Indicators?

Statewide Child Care Mentors

Oregon’s statewide child care mentors understand the day-to-day challenges and successes of child care providers. They can provide on-site coaching, share practice examples, and help providers with day-to-day management tasks. They are also great resources for providers who have questions about the Oregon Registry. Oregon’s statewide child care mentors are highly trained professionals who have expertise in early childhood development, child care, and adult education.

Community Partnerships

Community partnerships are needed to ensure that compensation initiatives align with community resources so participants are able to locate courses, scholarships, and other supports. Strong leadership is needed to successfully implement a compensation initiative. Community partnerships are needed to ensure that compensation initiatives align with community resources so participants are able to locate courses, scholarships, and other supports. Strong leadership is needed to successfully implement a compensation initiative.

Oregon Community Foundation Scholarship Programs

Are there ways to use the scholarship programs to strengthen particular types of care such as “Friend, Family and Neighbor” care and/or infant-toddler care or others?

Oregon has accessible education, training, and mentoring, but all are constrained by inadequate resources. Oregon delivers training and mentoring in communities across the state through its child care resource and referral (CCR&R) system. Early childhood college courses are offered by 16 of Oregon’s 17 community colleges and through a virtual degree program that allows members of the child care and early education workforce to pursue an associate’s degree via online courses from anywhere in the state. In addition to education and training delivery, Oregon has two key resources. The Oregon Center for Career Development in Childhood Care and Education leads policy setting on standards and assessment of competency levels for members of the child care and early education workforce, and OCF’s John and Betty Gray Scholarship Programs reduce financial barriers to education and training throughout the state.

Research indicates that improvements in the skill and stability of the child care and early education workforce requires a multi-pronged approach that recognizes that expectations and requirements, access to professional development, and compensation interact to affect the skill and stability of the workforce. For example, efforts to improve the quality of Oregon’s child care and early education workforce would have the highest chance of success if they include a coordinated effort that recognizes that improving child outcomes requires investing in members of the workforce and the programs in which they work.

Viewing Oregon’s quality improvement initiatives as parts of a coordinated effort to improve the quality of child care and early education in Oregon has the potential to increase the impact of each effort. For the Scholarship Programs, three collaborative efforts are relatively easy to accomplish:

1. Support efforts to increase professionalization and accountability by requiring certification in the Oregon Registry as an eligibility requirement in the Scholarship Programs.

2. Develop a statewide network of community-based mentors to provide on-site coaching, share practice examples, and help providers with day-to-day management tasks.

3. Create a statewide database of available resources, including scholarships, training opportunities, and mentoring programs, to help providers find the support they need.

Effective Investments in the Child Care and Early Education Profession ■ 5
Oregon partners envision certification in the Oregon Registry of all persons working in regulated child care and early education and storage of basic data on each in the proposed Training and Education Information Warehouse. Our ability to accurately measure the skill level and stability of the child care and early education workforce requires certification in the Oregon Registry by a substantial portion of the workforce. Making certification in the Oregon Registry an eligibility requirement for OCF Scholarships would increase participation in the registry.

2. Ensure that planning for the proposed Training and Education Information Warehouse include the ability to provide OCF with reports on training levels and retention of the child care and early education workforce over time. It would be important to have the ability to compare changes in Registry levels of Scholarship Program recipients with changes in levels of non-Scholarship recipients.

3. Continue the partnership with the Oregon Community College Gray Early Childhood Education Consortium, recognizing the dual impact of the Community College Scholarship Program. Almost entirely with state and federal resources, community colleges provide a critical piece of Oregon’s professional development system. Yet, this resource is available only if sufficient numbers of students enroll. Given low early childhood educator wages, most members of the workforce cannot afford college without financial assistance. Attending college while employed typically is associated with part-time enrollment, and thus difficulty obtaining federal and state financial aid. The Scholarship Program leverages state support of the college teacher training programs while making it possible for members of the workforce to attend college.

Linkages with other state efforts to improve child care are also likely to increase the impact of the Scholarship Programs but will require a greater investment of time and effort. However, research findings reported earlier in this paper demonstrate that training and education are best understood as a part of a set of factors that lead to positive teacher/caregiver practices. Growing evidence that training and education are more likely to change teacher/caregiver behavior if combined with RBPD would indicate the value of a partnership between the Scholarship Programs and the Child Care Resource and Referral statewide mentoring program. The mentoring program would have to be revamped so as to align with evidence that shows the particular characteristics of mentoring that have been proven effective as previously described in this paper. Strong evidence exists for pairing training and education with RBPD.

Higher teacher compensation has been shown to increase retention in the workforce and better teacher compensation is associated with higher quality. Relatively small annual awards appear to have an impact. Evidence from other states has shown that training and compensation together increase training levels and retention. Research suggests that a partnership that would pair OCF Scholarship Programs with a compensation initiative would increase the ability of the Scholarship Programs to encourage and support higher levels of skill and stability among members of the child care and early education workforce.

The finding that the environment in which the teacher/caregiver works influences practice would indicate that partnering the Scholarship Program with initiatives focused on improving quality at the facility level has the potential to strengthen the impact of the Scholarship Programs. Partnerships could link OCF’s investment in scholarships for training and education with community investment funds. Such a partnership could be as simple as giving priority for awarding scholarships to directors and teachers who work in programs participating in facility-level quality improvement initiatives while also committing to making improvements on at least one research-based quality indicator. Research indicates that these multi-pronged efforts are more effective mechanisms of change than training or education alone.

A number of Oregon community colleges have created training certificates designed to target and support individuals who are interested in transitioning from noncredit-bearing training and/or coursework to credit-bearing coursework (perhaps leading ultimately to a de-
gree). Certificate programs serve multiple purposes. They provide intensive, focused training for students who do not wish to continue in higher education toward the pursuit of a formal degree as well as for those individuals who wish to use the program as a pathway toward a two- or four-year degree. The certificate incorporates many of the characteristics of effective training. Certificates that meet training needs while also earning college credit may serve as a model for linking training and education; the Scholarship Programs could give priority status to students willing to work for a certificate.

A number of reasons exist for trying to increase training and education of those who care for infants and toddlers. Quality of care has been demonstrated to be lowest for this group of children in center care (Vandell & Wolfe, 2000) and children are the most vulnerable at this age. Scholarship priority could be given to center- and home-based caregivers of very young children, or a partnership could be created that targets this audience with training combined with mentoring.

Research indicates that the majority of family, friend, and neighbor caregivers do not consider themselves to be child care providers and do not want to participate in education and training designed for members of the child care and early education profession (Kreader & Lawrence, 2006; Porter, 1998). These caregivers do express high levels of interest in training and participate in training they perceive is appropriate for them. Effective strategies for supporting this group share more in common with parent education than with child care provider training (Porter, 2007). Training formats that have been found effective in reaching this population include caregiver/child play groups, home visiting, and group sessions focused on how to support children’s learning or other topics of high interest to the caregivers. We recommend that OCF explore the extent to which their parent education initiatives reach this important group of caregivers and the potential for further outreach to them. Linking these programs with other state efforts to serve family, friend, and neighbor caregivers would strengthen all efforts.
References


Appendix A

Advisory Committee for the Effective Investments in the Child Care and Early Education Profession Project
Colette Brown, Oregon Association of Child Care Directors and Providence Wee Care
Leslie Brown, Children’s Relief Nursery
Kim Cardona, Oregon Commission for Children and Families
Pam Deardorff, Oregon Center for Career Development in Childhood Care and Education, Portland State University
Christyn Dundorf, Early Education and Family Studies, Portland Community College and Growing the Profession: Building Professional Identity and Engagement in Early Care and Education in Oregon, Oregon Association for the Education of Young Children
Dell Ford, Head Start Child Care Collaboration Project, Oregon Department of Education
Barbara Griffin, Oregon Center for Career Development in Childhood Care and Education, Portland State University
Merrily Haas, Oregon Association for the Education of Young Children
Beth Hogeland, Family Resources and Education, Linn-Benton Community College
David Mandell, The Children’s Institute
Heidi McGowan, Oregon Commission for Child Care and Quality Indicator Project, Oregon Child Care Resource and Referral Network
Mary Nemmers, Oregon Child Care Resource and Referral Network
Dawn Norris, Child Care Division, Oregon Employment Department
Evelyn Roth, Department of Oregon Community Colleges and Workforce Development
Jeannie Suihkonen, Oregon Family Child Care Network
Sonja Svenson, Child Care Division, Oregon Employment Department

Project Team
Mary Louise McClintock, Early Childhood Program Director, The Oregon Community Foundation
Molly Trauten, Human Development and Family Sciences, Oregon State University
Roberta Weber, Family Policy Program, Human Development and Family Sciences, Oregon State University
For additional copies of this Literature Review, contact

Oregon Child Care Research Partnership
OSU Family Policy Program
Bates Hall Rm 219
Corvallis, OR 97331-5151
Telephone: (541) 737-9243
Facsimile: (541) 737-5579
E-mail: bobbie.weber@oregonstate.edu

Or download a copy from:
http://www.hhs.oregonstate.edu/hdfs/occrp-information