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Ten Current Trends in Early Childhood Education: Literature Review and Resources for Practitioners

Authors:
Kathleen McCallops, MS
Allison Karpyn, PhD
Jeff Klein, EdD
Shameeka Jelenewicz, MA

Funding Agency:
4.0 Schools

cresp.udel.edu

Pearson Hall
125 Academy Street
Newark, DE 19716-2922
Phone: 302-831-2928

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Center for Research in Education and Social Policy
University of Delaware
Pearson Hall, Suite 107
125 Academy Street
Newark, DE 19716
cresp-info@udel.edu
(302) 831-2928

cresp.udel.edu
Twitter: @udcresp

CRESP Leadership Team

Henry May, Director (**hmay@udel.edu**)
Allison Karpyn, Co-Director (**karpyn@udel.edu**)
Sue Giancola, Senior Associate Director (**giancola@udel.edu**)
Jeff Klein, Associate Director (**kleinjef@udel.edu**)

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TEN CURRENT TRENDS IN EARLY CHILDHOOD EDUCATION: LITERATURE REVIEW AND RESOURCES FOR PRACTITIONERS

EXECUTIVE SUMMARY

The current report takes a close look at 10 current trends in the ECE literature, including practice-oriented resources to support implementation, with an emphasis on areas of work which are particularly relevant for 4.0's ventures. Our goal is to provide a brief review of these emerging themes and, wherever possible, links and resources for those interested in practice-oriented materials or program examples. The 10 themes identified and included in this report are:

1) Mindfulness
2) Nature-based Early Childhood Education
3) Social Emotional Learning
4) Technology-Based Learning
5) STEM/STEAM Education in ECE
6) Early Language and Literacy Development
7) Culturally Responsive Teaching, Practices and Approaches
8) Child-Centered Instruction
9) Developmentally Appropriate Practice
10) Family Engagement

After providing a review of resources, the report makes several recommendations to 4.0 to further advance content area expertise and resources for fellows. These include 1) providing an annual review of current topics and best practices in each of the core areas where 4.0 has committed resources and, 2) expanding web or network resources to include active links, and easy downloads of toolkits, examples and 3) Discuss the possibility of initiating conversations with experts, which could include introductory and "under the microscope" recorded presentations, podcasts or other easily accessible mechanism to share tips and tricks from content area experts to fellows.

CONTENTS

INTRODUCTION

Investments in innovation to support children and families during the early childhood years is a strategic priority for 4.0. This report seeks to briefly review the ECE portfolio of projects or ventures undertaken by 4.0 fellows, and provide a summary review of recent trends in ECE best practice literature from peer reviewed, and national association resources. In our review we intend to provide foundational information related to the topic, and, perhaps as importantly, resources to support fellows and others in understanding how to translate the literature into action. As a result, each of the 10 topics summarized also includes links to tool-kits, action briefs and related resources to help fellows and the 4.0 coaches that support them, to accelerate progress in these areas.

BRIEF REVIEW OF 4.0'S ECE VENTURES

An initial review of survey data collected between 2013 and 2020 from 4.0 alumni, found that of the 36 ECE ventures since 2013 that completed the Alumni Survey ventures largely fall into four broad categories:

1) Efforts oriented toward supporting a child with school or childcare specific resources (n=8),
2) Special programs, often smaller than a school-specific effort, and often with a special curricular emphasis (n=22),
3) Efforts focused on "wrap-around" but related school or service provisions (networking, food distribution, assessment), (n=4) and
4) Efforts focused specifically on teacher or caregiver support or training (n=8).

While these categories capture the majority of ventures, it is also worth noting that many concurrently had an emphasis on literacy; social emotional learning (SEL), foreign language, mentoring, problem-based learning and recreation.

ECE TRENDS AND BEST PRACTICES: A LOOK AT THE LITERATURE

ECE best practices recognize today, perhaps more than ever, that all children need to learn to be adept socially, emotionally, and mentally, while both gaining critical school-preparation skills and acknowledging that the methods to do so can vary considerably. In 2021, we conducted a review of the current trends in ECE and identified 10 approaches which reflect areas where ongoing research and practitioner-oriented resources indicate promising outcomes for young children. These approaches are summarized as follows; also included are resources which help to orient the reader to their methodologies.

1. MINDFULNESS

Mindfulness is a psychological state of awareness of the present moment. It involves paying attention to what is happening in our surrounding environment and an awareness of our feelings, thoughts, and bodily sensations without judgement or interpretation. Research on the effects of mindfulness in ECE has focused primarily on parents and educators, and in particular, how mindfulness training for adults can reduce their stress and in turn positively impact children's development (Becker et al., 2017; Jennings, 2015). For example, research has shown that mindfulness training for early childhood educators has improved relationships among coworkers, enhanced employee well-being, and improved performance at work (The Mindfulness Initiative, 2016). In turn, these benefits can lead to the educator having a deeper understanding of children's emotional states and ultimately being able to better support their social, emotional, and cognitive development (Jennings, 2015).

MINDFULNESS RESOURCES

For more information on how to incorporate mindfulness techniques into early childhood organizations refer to:

Getting Started with Mindfulness: A Toolkit for Early Childhood Organizations

The ZERO TO THREE website provides additional and useful mindfulness resources. ZERO TO THREE is a non-profit organization dedicated to informing, supporting, and training educators, policymakers, and parents on how to improve the lives of infants and toddlers. Below are selected ZERO TO THREE resources regarding mindfulness for parents:

Executive Summary: How Can Mindfulness Support Parenting and Caregiving?

Rock and Rolling. Being Present: Mindfulness in Infant and Toddler Settings

Mindfulness Practices for Families

Mindfulness Is a Parent Superpower

2. NATURE-BASED EARLY CHILDHOOD EDUCATION

Nature-based preschools are early childhood programs where children spend the majority of their day outside, and where nature is incorporated into all aspects of the curriculum. Over the past three years, the number of nature-based preschools in the United States has more than doubled from approximately 275 in 2017 to 585 in 2020 (North American Association for Environmental Education, 2017). Nature-based preschools are an increasingly popular choice for families given the variety of ways that these settings enhance children's physical, mental, and emotional health and development (Kuo et al., 2019). A growing body of evidence shows that these preschools help foster happy, healthy children by promoting physical activity and motor development, reducing stress, and enhancing social emotional development, brain development, and communication skills (Rymanowicz et al., 2020). Children's academic learning is also fostered, since children attending nature-based preschools are just as prepared for kindergarten as children from traditional preschool programs (Burgess & Ernst, 2020; Cordiano et al., 2019).

NATURE-BASED EARLY CHILDHOOD EDUCATION RESOURCES

It is notable that financial, logistical, and/or cultural barriers may exist for families that want to access nature-based preschools. The following toolkit provides two key categories of information: first, ten practices that nature-based preschool providers can adopt to promote equity, and second, examples of preschools that are successfully implementing the nature-based practices:

Outdoor Preschool Equity Toolkit

For more information on nature-based learning, programs, and assessments, see the following resources from the U.S. Department of Health and Human Services and the Administration for Children and Families:

Nature-Based Learning and Development for Administrators

10 Tips to Enhance Your Outdoor Play Space

25 Easy Ideas for Nature Play for Early Childhood Centers

Play Space Assessment for Preschool

Childhood in the Garden: A Place to Encounter Natural and Social Diversity

Affordable Settings and Elements: Ideas for Cost Effective Solutions

Infant and Toddler Outdoor Play Space Assessment

3. SOCIAL-EMOTIONAL LEARNING (SEL)

SEL is the process of developing and applying knowledge and skills to: assess and manage emotions; express emotions effectively; empathize with others; establish and maintain healthy and positive relationships; and, make responsible decisions. SEL is important for children's emotional health as well as their overall learning, development, and school readiness (Blewitt et al., 2018). Research has shown that children who received SEL instruction exhibit fewer behavioral problems, enhanced positive social behaviors, lower levels of emotional distress, and significantly better academic performance (Yang et al., 2019). While teaching SEL in classrooms is vital to children's learning and development, it is also important for SEL to be implemented across multiple settings (e.g., classrooms, families, schools, and communities) so that children's SEL skills are promoted and enforced outside of the classroom and therefore further enhance their positive development (Bierman et al., 2016).

SEL RESOURCES

One of the leaders in SEL is the Collaborative for Academic, Social, and Emotional Learning (CASEL). This organization supports educators by providing high-quality, evidence-based information regarding SEL, including how to promote equity through the implementation of SEL programs. Some of CASEL's key resources are provided as follows:

Preschool SEL Resources

Strategies for Social and Emotional Learning: Preschool and Elementary Grade Student Learning Standards and Assessment

Effective Social and Emotional Learning Programs: Preschool and Elementary School Edition

Additional organizations also support the development of adult's and children's SEL. Some examples include:

Center on the Social and Emotional Foundations for Early Learning:

Parent Training Modules

Collaboration between Indiana Department of Education and Butler University:

Social-Emotional Learning Educator Toolkit

National Association for the Education of Young Children (NAEYC)

Promoting Young Children's Social and Emotional Health

4. TECHNOLOGY-BASED LEARNING

Over the past year, the COVID-19 pandemic has meant that many educators have turned to technology to facilitate student learning. When using technology in the classroom, it is important for educators to consider their students' developmental levels since developmentally appropriate uses of technology are encouraged for helping young children grow and learn (Office of Educational Technology, 2018). When learning occurs at home and online, however, family ties and strong caregiver relationships are important; otherwise, participation is challenged and the benefits for children compromised. A key lesson from the epidemic for many early childhood educators is that caring relationships are as important as the technology (Bales et al., 2020). While the effects of COVID-19 advanced our understanding of technology's utility to teach young children, it also solidified much of what is already known. Guidelines for the careful selection of learning activities to promote both critical thinking and collaborative opportunities, continue to hold true (Bales et al., 2020). For example, it is recommended that young children use technology as part of a classroom learning program if the technology: (1) supports the healthy development of that child, and (2) is working to achieve learning outcomes (Office of Educational Technology, 2018).

Ideally, technology should not replace other classroom learning materials nor substitute for interactions with teachers or peers. Technology can be used to increase learning opportunities for children with examples that include virtual tours of art and science museums. These virtual learning experiences support creativity and exploration, particularly when scaffolded and supported alongside student benchmarks. However, for technology to work to meet the needs of all students, programs must also ensure that all families are included and have necessary devices, subscriptions, and internet access as well as the support to troubleshoot challenges. Direct contact with families is recommended in order to move beyond simply handing out devices to addressing participation challenges and solutions.

TECHNOLOGY-BASED LEARNING RESOURCES

For additional information regarding the use of technology in the ECE setting, refer to this resource from the U.S. Department of Education's Office of Educational Technology:

Guiding Principles for Use of Technology with Early Learners

While technology can support the learning and development of children, it can also negatively impact their health and development. In 2016, the American Academy of Pediatrics recommended that children ages 0-2 should not use technology except for video chatting, and that children ages 2-5 should only use technology for one hour a day. For the full statement, reference the following article:

Media and Young Minds

5. SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS/SCIENCE, TECHNOLOGY, ENGINEERING, ARTS, AND MATHEMATICS

There is a growing emphasis in ECE on intentionally teaching students about STEM. Teaching students STEM concepts helps to develop critical thinking and problem-solving skills, as well as to encourage curiosity (Tippet & Milford, 2017; Torres-Crespo et al., 2014). STEM activities can be implemented into ECE curricula in a variety of ways; these include building a tower with blocks, constructing a marble run, solving a puzzle, planting a garden, and using a magnifying glass. These skills are critical for children's brain development and have shown to be predictive of future academic success (Kermani & Aldemir, 2015). The growing STEAM (i.e., science, technology, engineering, arts, mathematics) movement includes the arts, since these are also necessary to support children's development (Wahyuningsih et al., 2020; Wynn & Harris, 2012). Incorporating the intersection of the arts with the STEM fields can supports children's creative and innovative thinking while also improve student engagement and learning (Radziwill et al., 2015).

STEM/STEAM RESOURCES

For ways to engage children in STEM, reference the following resource from the Massachusetts Department of Early Education, developed as part of a grant received by the U.S. Department of Education:

Engaging Children in STEM

To learn more about how to incorporate STEAM activities into the classroom, visit:

Breaking Down STEAM for Young Children

For teachers, parents, and caregivers who are interested in free, evidence-based STEM (as well as literacy resources) for children, check out the Ready to Learn (RTL) Initiative. RTL is funded by the U.S. Department of Education, and in collaboration with the Public Broadcasting Service (PBS) offers games and apps for children ages 2 to 8:

Ready to Learn 2015-2020 Initiative

To understand more about the benefits of STEM learning, reference the following report that was created by the Joan Ganz Cooney Center at Sesame Workshop and New America, funded by the National Science Foundation:

STEM starts early: Grounding science, technology, engineering, and math education in early childhood

6. EARLY LANGUAGE AND LITERACY DEVELOPMENT

Recent studies have highlighted the positive impacts, both short-term and on academic skills later in school, when children receive early language and literacy skills training (Barnett et al., 2010; Mol & Bus, 2011). Young children need to develop early language and literacy skills that lay the foundation for reading and writing. Early language skills focus on vocabulary development while early literacy skills focus on print awareness, vocabulary, alphabet knowledge, and phonological awareness (Foulin, 2005; Justice & Ezell, 2001; Mann & Foy, 2003). Developing these skills in early childhood is also vital to children's brain development. Children who receive high-quality early language and literacy skills training learn how to read and write well, resulting in positive effects on their social and emotional development (Dickinson & Porche, 2011). Early language and literacy skills training also lays the foundation for lifelong literacy skills which are essential to academic and professional successes. Educators and parents can develop children's early language and literacy skills by playing, talking, singing, reading, and writing with them (Ece Demir-Lira et al., 2019; Rowe et al., 2016). There is also emerging evidence to suggest that digital tools such as apps and tablets have the potential to support early language and literacy skills (e.g., Aram & Bar-Am, 2016; Crescenzi et al., 2014; Flewitt et al., 2014).

EARLY LANGUAGE AND LITERACY DEVELOPMENT RESOURCES

For tips on how to develop children's early literacy skills, see the following document written by the U.S. Department of Education:

Talk, Read and Sing Together Every Day! Tips for Infant & Toddler Teachers and Caregivers

For teachers, parents, and caregivers interested in free, evidence-based STEM and literacy resources for children, check out the Ready to Learn (RTL) Initiative. RTL is funded by the U.S. Department of Education and in collaboration with PBS to offer games and apps for children ages 2 to 8:

Ready to Learn 2015-2020 Initiative

7. CULTURALLY RESPONSIVE TEACHING, PRACTICES, AND APPROACHES

School-age children in the United States have become more diverse over the past few decades (de Brey et al., 2019), creating a need for culturally responsive teaching. Culturally responsive teaching is a student-centered approach that bridges the gap between students' school and home cultures. It is a strengths-based approach that acknowledges that culture is central to learning and recognizes students' backgrounds as assets to their own learning as well as to other students in the class. It is based on the foundation that when academic knowledge and skills are based on students' lived experiences, students will find the material more meaningful, and that they will both be more interested and learn more thoroughly and easily. Culturally responsive teaching strategies should be incorporated into all aspects of curriculum and assessment rather than just viewed a supplemental approach (Gay, 2000, 2002). Implementing culturally responsive approaches: improves academic success and communication skills; encourages collaboration; promotes inclusion; and, builds trust, all while also fostering positive relationships with families and schools (Bennett et al., 2018; Byrd, 2016; Ladson-Billings, 2014).

CULTURALLY RESPONSIVE TEACHING, PRACTICES, AND APPROACHES RESOURCES

For recommendations for racially relevant children's literature and race-related teaching practices in classrooms as well as methods for choosing high-quality diverse literature, refer to the following NAEYC article:

Reading Your Way to a Culturally Responsive Classroom

For more information about the characteristics of culturally responsive teaching and how each characteristic can inform classroom practices, reference the following article from The Education Alliance at Brown University.

Principles for Culturally Responsive Teaching

For more information on the importance and benefits of and tips for incorporating culturally responsive teaching strategies into the classroom, see the following article from American University's School of Education:

Culturally Responsive Teaching Strategies: Importance, Benefits & Tips

Developed by Region X Equity Assistance Center for the Indiana Department of Education, the following toolkit provides educators with research-based instructional strategies for culturally responsive teaching:

Culturally Responsive Teaching: A Guide to Evidence-Based Practices for Teaching All Students Equitably

8. CHILD-CENTERED INSTRUCTION

Child-centered instruction (also referred to as student- or learner-centered) is different from a traditional teacher-directed approach because it shifts the focus of instruction from the teacher to the student. It creates a learning environment where children are active participants in their own learning, rather than passive receivers of information.

Through child-centered instruction, children learn through hands-on experiences by engaging in activities focused on the learning process rather than a product (Cornelius-White, 2007). In addition, children lead teachers to what they are interested in learning and teachers facilitate that learning as opposed to direct instruction.

Research has shown that child-centered instruction is related to improved academic success (Lerkkanen et al., 2016). It also encourages them to develop relationships with their peers and improves their social and emotional skills as well as executive function skills (Burchinal et al., 2008). Child-centered instruction is central to other trends in ECE, such as nature-based preschools and culturally responsive teaching. Some examples of preschools that incorporate child-centered instruction include Reggio Emilia, Montessori, and Waldorf.

CHILD-CENTERED INSTRUCTION RESOURCE

For more information on the difference between student- and teacher-centered learning, reference the following article:

Complete Guide to Teacher-Centered vs. Student-Centered Learning

9. DEVELOPMENTALLY APPROPRIATE PRACTICE

Developmentally appropriate practice is a teaching method that promotes children's optimal development and learning through strengths-based strategies. Educators who implement developmentally appropriate practices must incorporate three principles: (1) commonality in children's development, (2) individuality of each child, and (3) the social and cultural contexts of each child (NAEYC, 2020). Commonality in children's development reflects human development research demonstrating that universal sequences of change and growth for children occur in all domains of development—cognitive, emotional, social, and physical. Educators should be knowledgeable about these sequences according to children's ages in order to utilize developmentally appropriate practices. Individuality of each child is a recognition that each child is unique. Each child has their own learning style, personality, and family background and so teaching practices should be appropriate based on these individual needs. The social and cultural context of each child is important in each one's life, and so educators should ensure that teaching is relevant, meaningful, and respectful of children and their social and culture contexts. Implementing all three aspects of developmentally appropriate practices is important for all children, as an ever-increasing body of research has demonstrated the immense amount of learning and development that occurs in early childhood (NAEYC, 2020; Yoshikawa et al., 2013). These practices have shown to reduce learning gaps and increase children's academic success.

DEVELOPMENTALLY APPROPRIATE PRACTICE RESOURCES

For more information on developmentally appropriate practices and implementation recommendations for early childhood educators, refer to the following position statement from NAEYC:

Developmentally Appropriate Practice (DAP) Position Statement

In addition, NAEYC has development six guidelines for early childhood professionals for implementing developmentally appropriate practices in the classroom:

Guidelines for Developmentally Appropriate Practice in Action: Using Knowledge of Child Development and Learning in Context

10. FAMILY ENGAGEMENT

Family engagement in schools occurs when families (i.e., parents and other family members) and school personnel work together to support the cognitive, emotional, and physical development and learning of their children (Weiss et al., 2014). Family engagement in early childhood is important because parents and family members play an important role as children's first and longest lasting teachers and advocates (Epstein, 2010; Weiss et al., 2014). Examples of effective family engagement practices include: inviting families to participate in goal setting and decision making regarding their children's learning and development; and, utilizing two-way communication between families and educators that is continuous and timely as well as in the family's language preference (see references below for additional practices). Family engagement is designed to foster and support partnerships between the family and the school to support strong parent-child relationships, family well-being, and children's' learning and development. Furthermore, it can improve children's' school readiness, enhance children's social skills, reduce behavioral issues, and improve academic success (Powell et al., 2010).

FAMILY ENGAGEMENT RESOURCES

For more information on how family engagement can be facilitated through technology, refer to this article written by scholars at RAND:

Families, Powered on Improving Family Engagement in Early Childhood Education Through Technology

Written by NAEYC, the following article describes six principles of effective family engagement practices in early childhood as well as examples of exemplary family engagement programs:

How do early childhood education programs meet the challenge of engaging families in their child's early learning and development?

For more information on how parent engagement can improve SEL outcomes during early childhood, refer to the issue brief below created by Pennsylvania State University with support from the Robert Wood Johnson Foundation:

Parent Engagement Practices Improve Outcomes for Preschool Children

CONCLUSIONS & RECOMMENDATIONS

In order to keep pace with best practices and trends in ECE research, this brief provides a review of 10 themes: Mindfulness, Nature-based Early Childhood Education, Social Emotional Learning, Technology-Based Learning, STEM/STEAM Education in ECE, Early Language and Literacy Development, Culturally Responsive Teaching, Practices and Approaches, Child-Centered Instruction, Developmentally Appropriate Practice, and Family Engagement. The report itself is a result of a Research-Practice Partnership effort established over the past year which has helped to maximize learnings from existing survey data, ask critical questions about the resources and needs internal to 4.0 and generate resources, and evidence to help build expertise.

As collaborations, partnerships, and the needs of 4.0 expand to include wider content area expertise, we offer several recommendations. First, we suggest this and similar efforts would be fruitful and believe that providing a regular review of current topics and best practices in each of the core areas where 4.0 has committed resources should be considered moving forward as a planned practice. Further, assuming such resources do prove useful for fellows, coaches and staff, 4.0 may wish to consider expanding web or network resources to include active links, and easy downloads of toolkits and the examples they cite. Last, we recognize that many of these content areas are rapidly evolving, and recommend 4.0 consider a complimentary effort including conversations with experts, which could include introductory and "under the microscope" recorded presentations podcasts or other easily accessible mechanism to share fellow needs and questions on specific education-related content areas with responsive tips and tricks from content area experts.

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