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How Can Play-based Learning with Authentic Assessment Practices Support Healthy

Development in Preschool Classrooms?

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Abstract

Early childhood educators need to recognize the importance of implementing play-based learning as a developmentally appropriate practice to support young children's development. Play provides children opportunities to demonstrate knowledge and understandings through materials in the environment, expand on prior experiences and learn alongside peers. Teachers can authentically gain valuable information from children's play to plan appropriate lessons to foster development (NAEYC, 2009). Instead of using natural routines to assess and gather information about a child's knowledge and behavior, educators use standardized methods to determine a child's capabilities. This paper synthesized available research on qualitative and quantitative studies that analyzed the effects of authentic assessment to support educators understanding of a child's developmental domains. Research examined how naturally assessing children in the environment informed teachers to create a meaningful curriculum that was appropriate and monitored individuals progress continuously. Other studies evaluated the effects of play-based learning to promote development. Research reviewed positively supported preschool teachers to use play and authentic assessment for a more accurate understanding of an individual's knowledge. An assessment tool that is authentic supports collection of on-going data to provide teachers feedback to make instructional changes.

Keywords: authentic assessment, preschool, play-based assessment, developmentally appropriate

Chapter One: Introduction

Professionals in the field of early childhood need to recognize the benefits of appropriate teaching methods to provide healthy environments for children to develop. Preschool is one of many children's first experiences in a school environment with same aged peers. Early childhood learning experiences play a vital role in children's development of physical, social, emotional, cognitive, language, and literacy skills (Heidemann & Hewitt, 2010). Children attend school with different previous experiences and knowledge, therefore, assessing children helps educators gather information to effectively plan and deliver lessons that support growth and development (Cobble & Bredekamp, 2009). The practice of assessment for young children has benefits, but educators need to use appropriate methods to fully understand the development of induvial children.

Research has documented the effectiveness of play as a practice to foster young children's cognitive growth and development of skills (Heidemann, & Hewitt, 2010; Taylor & Boyer, 2019). It is necessary to support children with long extended periods of time (more than 30 minutes) for children to engage with materials (Heidemann, & Hewitt, 2010). Children are active and curious learners. Play provides children opportunities to make mistakes while constructing knowledge through exploration (Taylor & Boyer, 2019). Teachers who effectively implement play-based learning gain knowledge about individuals' strengths and areas of growth as a child interacts with materials in the environment (Macy et al., 2016). Informed teachers use data to plan meaningful lessons to extend learning.

Preschool educators who use developmentally appropriate practices foster healthy development. Using the method of authentic assessment during play informs teachers to intentionally plan and integrate lessons to encourage individual's development. This chapter

begins with an introduction of how developmentally appropriate practices must be understood to be an effective teacher. Second, the use of assessments to foster healthy growth needs to be recognized. Third, how authentic assessment is an appropriate method to gather evidence and finally, how the approach of play-based learning positively impacted children's developmental domains will be explained in this chapter.

Developmentally Appropriate Practice in Preschool Classrooms

Preschool learning readiness programs were created to give three and four-year-old children opportunities to develop and gain rich learning experiences before entering kindergarten. The United States has early childhood programs that vary in structure, time, and curriculum expectations dependent on the state. In 2013, all 50 states had written documentation of early learning standards for young children (Gronlund, 2014). This indicated the importance of advancing early childhood education (ECE) for young children.

Learning standards provide educators with guidelines to understand the development of a child and what is appropriate to teach specific age levels. Early learning standards outline developmental milestones that children achieve in somewhat of a systematic order to build upon skills children have acquired (Gronlund, 2014). Developmentally appropriate practices (DAP) were created to define best practice for children's learning and development. The term DAP describes how children learn and develop informed by literature and theory (Copple & Bredekamp, 2009). It represents educator's responsibility toward effective use of practices and strategies to nurture excellence in learning. DAP will be a term used throughout the review to explain researched appropriate practices for teachers to implement to assist children's development to reach full potential.

The National Association of Education for Young Children (NAEYC) is a well-known organization that promotes and guides early childhood professionals to use DAP. The association has created policy statements specifically for early childhood to improve the quality of education for young children and build a bridge between primary or elementary schools (NAEYC, n.d.). NAEYC will be referred to in the literature review as a resource advocating for educators use of healthy, developmentally appropriate practices.

Framework of Developmentally Appropriate Practices

The NAEYC Position Statement described the framework of DAP for children from birth to eight-years old (2009). The research documented has provided guidance for professionals' implementation of best practice to promote high-quality leaning and reduce learning gaps (NAEYC, 2009). The structure is guided from literature and theory (Copple & Bredekamp, 2009) and assists practitioners to understand appropriate and inappropriate practices (Mohamed & Al-Qaryouti, 2016). Three core parts of DAP are: understanding the development of a child at different stages; individualizing instruction for each child; and involvement of families to gain knowledge of culture, values and expectations (NAEYC, 2009). Together, these allow teachers to deliver intentional, meaningful experiences for children and families.

Teachers Role in Developmentally Appropriate Practices

Teachers that effectively implement DAP use five key elements: create an environment of caring learners, teach to enhance development and learning, plan a curriculum based on individual goals, use assessment tools to gauge children's development and establish rapport through building strong relationships with children and families (Copple & Bredekamp, 2009). The combination of these practices provides children with optimal education experiences.

Teacher's need to create strong relationships with children. Building rapport is critical to

understand background knowledge, recognize if a child is under stress, plan developmentally appropriate experiences and monitor children's progress (Copple & Bredekamp, 2009). Goldstein and Flake (2015) stated a child is more likely to show an accurate representation of knowledge when a relationship is created, and it may take time to develop. It is important to have an accurate understanding of children's previous life experiences as teachers plan lessons to foster development.

Scaffolding individual's learning is important part of a teacher's planning of curriculum. Scaffolding ensures children's goals are both achievable and challenging (Copple & Bredekamp, 2009) as a teacher uses modeling or questioning to support the learner develop a new skill (Heidemann & Hewitt, 2010). The strategy of scaffolding is used to break down a learning target if the skill is beyond a child's ability (Heidemann & Hewitt, 2010). Vygoski, was a well-known early childhood theorist, used the strategy of scaffolding to explain the zone of proximal development (ZPD) theory (Bodrova, 2008). The theorist believed individuals to have an independent performance of development and an assisted performance of development, where a child could demonstrate additional knowledge with the support of a peer (Heidemann & Hewitt, 2010). ZPD defines the distance between what a child can do on his or her own and what a child can do with the assistance of another peer (Heidemann & Hewitt, 2010). Understanding children's skills and development informs teachers decisions to scaffold learning when planning a curriculum.

Expectations have been placed on preschool, kindergarten, and primary grade levels to introduce more academic content (Gronlund, 2014). The increase in curriculum content impacts appropriate practices used by teachers. Positive outcomes of learning occurred when an evidence-based curriculum is integrated by a teacher (NAEYC, 2003). Mohamed and Al-

Qaryouti's (2016) research analyzed DAP through the comparing teachers' beliefs and classroom practices. Results indicate that teachers had strong DAP beliefs, however, practices did not demonstrate as high (Mohamed & Al-Qaryouti, 2016). This identified a problem in early childhood educator's (ECE) delivery of high-quality learning experiences if evidenced-based research were not implemented.

DAP has addressed the role of teachers to plan, implement and self-reflect (Copple & Bredekamp, 2009). This process allows teachers to make changes to meet the needs of every child. Reflection supports teachers to critique practices to become a better professional. Best practices emphasize individual instruction (Copple & Bredekamp, 2009). Assessment practices need to be used to inform educators about children's knowledge to effectively plan a strong, appropriate curriculum. The next section of this paper discusses the importance of using assessment to inform teachers planning process to implement appropriate lessons.

Assessing Children's Development

Assessment is the process of gathering data to evaluate standards (McAfee et al., 2016). This could include assessing children's present levels of development, an early childhood program, an educator's practice, or a school district to gain information on performance (Banerjee & Luckner, 2012). Assessment unifies the field of education by holding teachers and programs accountable (Gronlund, 2014). This literature review will discuss assessment as a way understand children's knowledge and skills. The topic of assessment is important because it informs teachers to prepare a developmentally appropriate curriculum and instruction based on the learners (McAfee et al., 2016; NAEYC, 2009). Standards mandate teachers to monitor children's progress toward meeting age appropriate objectives (McAfee et al., 2016), therefore,

assessment provides evidence of what a child can do. Different methods of assessment are available for schools and educators to use to track children's knowledge and skills.

Types of Assessment

Two forms of assessment will be highlighted in this literature review. The first type, a developmentally appropriate method, is referred to as authentic assessment. This is a favored method for early childhood educators as it considers the development of the whole children and records data through observations over an extended amount of time (Banerjee & Luckner, 2012; Pool & Hampshire, 2019). Children grow and learn at different paces; therefore, implementation of a DAP curriculum needs to be on-going and flexible to meet individual learners' goals (NAEYC, 2009). Authentic assessment is defined by Heidemann and Hewitt to document information about a child engaged in activities in a familiar environment (2009). Natural, informal or performance based may be terms substituted for authentic in this review.

The second type of assessment in this review is called standardized assessment.

Standardized is defined as using the same assessment for every child being evaluated (McAfee et al., 2016). This means every individual is asked the same questions or must perform the same task. It has strict procedures to administer and the score is based on norm-referenced data (NAEYC, 2003). Summative, conventional, norm-referencing, or directed performances are other terms that may be used in this literature review for standardized assessment. A summative assessment identifies if a child can or cannot do a skill in comparison to an authentic assessment that provides on-going evidence of what a child can do in terms of the skill.

Previous research and studies have identified needs for assessment changes (Macy et al., 2016). Standardize methods of assessment have been used for years to determine children's progress along with eligibility for intervention and special education services (Keilty et al.,

2009), however, criticism on a test that only provides a small view of a child's performance for a diverse population has been recognized as a misuse (McAfee et al., 2016). Assessing with norm-referenced tests does not allow teachers to report children's skills and knowledge applied in real-life context (Dennis et al., 2013).

Copple and Bredekamp (2009) described how assessments should inform teachers what a child can do by oneself, but also what a child can do with others. One form of documentation does not summarize a full representation of what a child can do. Best practice has identified that assessment measures for young children need to be on-going due to children's rapid development skills (Banerjee & Luckner, 2012). Pool and Hampshire's study in 2019, discussed findings of using purposeful planned forms and to gather data about how a child functions in the environment. Results indicated a teacher making changes to meet the needs of individual students. Established developmentally appropriate daily routines support teachers to document observations of a child's knowledge to plan interventions or lessons to support development of skills. Intervention is a teaching strategy to assist children in building new skills to not fall behind (NAEYC, 2009).

Challenges with Assessment Measures

DAP reveals assessment to be used to inform educators practices to implement individualized, appropriate learning (NAEYC, 2009; Copple & Bredekamp, 2009). Gronlund (2014); Banerjee and Luckner's (2012) identified challenges educators face when assessing young children. Children are continuously learning and developing, therefore continuous measure of progress is needed (Gronlund, 2014). Norm-reference tests are being implemented in preschool programs to determine skills a child can do based on the standards assessed in the exam. Standardized tests used to determine children's proficiency at an older age is

inappropriate, therefore, using them in early childhood is not appropriate either (Banerjeek & Luckner, 2012). The issue with standardized methods is that it does not provide on-going data of a child's progress which could lead to misleading accuracy (Dennis et al., 2013).

Another problem involves the pressure to teach academic content. Gronlund (2014) noted how teachers classroom practices in instruction has changed to deliver content to teach standards. The high-stake of standardized assessments has pressured teachers into using unhealthy teaching strategies (McDonald, 2018). Instead of using both child-guided and teacher-guided learning experiences (Copple & Bredekamp, 2009), teacher-directed instruction to engage children toward a rigorous curriculum has become a focus. Child-directed learning refers to children using the environment to direct learning and develop understandings through initiating experiences of discovery, exploration, and experimentation alone or with peers and the support of teachers (NAEYC, 2009). Children are exposed to different materials of interest are intentionally placed around the classroom in high-quality ECE settings for teachers to guide and expand children's knowledge (Gronlund, 2014). Teacher-directed instruction focuses on the adults planned goals and offers children to engage and participate (NAEYC, 2009). Large group times is an example of teacher-guided instruction. Educators need to evaluate practices in the daily schedule to effectively create a healthy environment that promotes child-directed learning instead of solely relying on teacher-guided instruction to teach standards. Appropriate methods of assessment are needed to fully understand a child's skills and knowledge to prepare a curriculum that expands of prior knowledge.

Authentic Assessment

Research has identified the best way to get to know a child is though observations, talking to children and analyzing work samples (Copple & Bredekamp, 2009). Authentic

assessment uses these strategies to inform teachers about a child. In Latin, the term assessment is referred to as sitting next to a person to get to know (Macy et al., 2016). Authentic assessments are observations that collect how a child functions during daily routines overtime (Bagnato et al., 2014). A teacher is near the child or group of children watching and documenting what happened. The process of collecting information in an on-going method that provides children multiple opportunities to demonstrate achievement of skills.

Dennis, Rueter and Simpson (2013) discussed assessment documentation to include gathering information from caregivers and familiar adults in a child's life. School is one environment a child demonstrates skills; nonetheless, multiple other environments play a role in a child's development. A study in the next chapter analyzed the importance of partnering with families to support a child's goals in different environments and to meet the requests of a family (Turan &Meadan, 2011). Effective preschool teachers form relationships with families to support open communication to gain information about a child outside of school (Cobble & Bredekamp, 2009).

Bagnato, Goins, Pretti-Frontczak, and Neisworth's (2014) study examined research on best practice for assessing to provide interventions in early childhood. The researchers concluded that authentic assessment measurements were more accurate and represented the whole child in comparison to conventional testing (Bagnato et al., 2014). Educators need to reconsider the use of standardized assessments together evidence about the whole child. Authentic assessment supports teachers with natural evidence of children's developmental areas needed to guide and plan further scaffolded instruction Dennis et al., 2013). Types of authentic documentation used to gather data will be described in the second chapter of this literature review.

Play-Based Learning

Play is a complex, purposeful activity that is a key component to a child's development. Research has discussed five developmental domains that progress as children play: social-emotional, cognitive, physical, language and literacy (Heidemann & Hewitt, 2010). Early childhood theorists studied the effect of play contributing to children's development. Piaget identified children's stages of development to reflect stages of play (Thomas et al., 2011). Heidemann and Hewitt (2010) described this theory and explain a child who is two years old used a play phone as a microphone where a child who is five would use the phone to call a family member. Piaget's theory of play showed children developing stronger cognitive understandings through experimentation (Heidemann & Hewitt, 2010).

Vygotsky was another theorist who studied the practice of play (Bodrova, 2008; Heidemann & Hewitt, 2010; Thomas et al., 2011). Research stated how Vygotsky's theory describes play as a reflection of children's developmental level, but also essential for children's development to progress (Bodrova, 2008). Play, in Vygotsky's eyes, was defined as social-dramatic or make-believe scenarios (Bodrova, 2008). The role of a teacher during play is important to facilitate and extend learning (Thomas et al., 2011). Vygotsky's ZPD was described earlier in this chapter to describe how teachers support learners' to developing skills though demonstrating or modeling. Through research, Vygotsky identified play to contribute to children's early literacy skills, language development, self-regulation, and imagination from this theorist (Bodrova, 2008). Other researchers documented that creativity, cognitive and physical development occurred through play (Heidemann & Hewitt, 2010).

Play Supports Growth of Developmental Domains

Cobble and Bredekamp (2009) describe how developmental domains are all closely connected and influence one another. Children acquire new skills and deepen knowledge when interacting with others. Peer communication in early childhood classrooms includes verbal interactions, gestures, and writing. Language to create roles, rules, and vocabulary expansion is deepened between children through communication. Social-emotional skills of sharing, turn-taking, working together towards a common goal, problem solving, and negotiation use communication and develops when children are interacting with on another (Heidemann & Hewitt, 2010). Physical development happens as children move about the environment and manipulate materials during play. An environment that is filled with rich learning experiences contributes to children's academic growth during play as vocabulary is introduced through materials, activities that support children to naturally practice counting, engage in print materials and use fine motor skills to write are available for children act out real life situations (Heidemann & Hewitt, 2010).

Teacher's Role in Facilitating Play

An effective teacher plans a schedule that supports children to have long periods of time of play to interact with peers and adults in an environment that encourages exploration and investigation (Copple & Bredekamp, 2009; Heidemann & Hewitt, 2010). Teachers need to facilitate and be involved in play. It is the teacher's role to extend children's thinking, model, challenge and ask questions to strengthen understandings and knowledge (Copple & Bredekamp, 2009). Creating a rich environment with materials and centers is critical for children to interact with. Heidemann and Hewitt (2010) discussed the importance of having resources for individual play, but also cooperative play where a group of peers can interact together. A library, dramatic

play area, block center, writing center, math and literacy center with fine motor manipulatives are all encouraged to be in the environment.

Teaches who are engaged during play learn different things about children. Through observations a teacher can learn what areas of the room a child frequently plays in, favorite materials in the environment, if a child has self-regulation skills and communication skills, who the child interact with and what level of development the child is play at (Heidemann & Hewitt, 2010). This information provides teachers with an analysis of a child's development and if interventions or support is needed. A teacher's responsibility is to respond to children's skills that need support (Copple & Bredekamp, 2009). Guiding and modeling appropriate behaviors and skills can be implemented when teachers physically sit down with children during play. As educators are near children during play, teachers can naturally step in when necessary to guide children feel need assistance with problem solving with peers (Copple & Bredekamp, 2009).

Conclusion

Early learning standards have provided educators with guidance about the developmental stages of a child. Teachers needed to understand the importance of appropriate teaching methods to gather a complete view of a child's development to appropriately foster growth. Educators who believed in DAP were not using all appropriate methods in the classroom (Mohamed & Al-Qaryouti, 2016). DAP was created to support teachers in creating high-quality learning environments that foster growth through keeping educators accountable to best practice (Copple & Bredekamp, 2009; NAEYC, 2009). Teachers who implemented assessment opportunities to observe and gather information in the natural environment about children's development were able to create achievable goals for individual's progression (Dennis et al., 2013; Pool & Hampshire, 2019; Turan & Meadan, 2011). Rajapaksha (2016) found play to increase children's

language skills. Research studied identified evidence to understand how play-based learning with authentic assessment supports healthy development in preschool classrooms. The research focused on developmentally appropriate practices in early childhood to inform teachers in using best practice when assessing children in the future.

Chapter Two: Literature Review

Early childhood education (ECE) is a foundation for children's future academic success (Goldstein & Flake, 2015). Learning occurs in environments that are intentionally planned (McDonald, 2018) by teachers who use developmentally appropriate practices (DAP). Researchers have discovered how appropriate assessments provide valuable information to educators about children's developmental levels and progression of skills. Assessment of children's skills guides teachers to implement a curriculum (Cobble & Bredekamp, 2009) that scaffolds learning to support children's development at an appropriate level (NAEYC, 2009).

The literature review in this chapter evaluated how authentic assessment and play-based learning support teacher's implementation of meaningful learning activities. The review analyzed studies that focused on developmentally appropriate methods of assessment to collect information on the whole child to inform teaching. The review also examined studies impact of play-based learning to develop children's skills. The first section of the review described the framework of DAP, explored teachers' beliefs about appropriate practices and explained the role of on-going, meaningful documentation in early childhood classrooms. The impact of using tools, families and interventionists in the assessment process are defined next. The following section examined the social validity of authentic assessment and identified tools that support natural-based observations. Last, an overview of how teacher's implementation of play-based learning benefits children's developmental through authentically assessing is analyzed.

Developmentally Appropriate Practices in Preschool Classrooms

The DAP framework was designed as a tool to assist educators and policy makers understand appropriate and inappropriate practices when teaching young children (Mohamed & Al-Qaryouti, 2016). Teachers make decisions every day that impact children. Educators must

understand the development of a child to be able to create appropriate goals that foster growth (NAEYC, 2009). *NAEYC's Position Statement* described an effective teacher as one who is informed of individuals social and cultural background, interests, strengths, family values and expectations and prior experiences (NAEYC, 2009) to create an inclusive environment for all learners. Responsive, intentional teachers build curriculums based on knowledge gained through relationships with a child, relationships with families and observations of how a child interacts in the environment.

Teachers Beliefs and Use of Developmentally Appropriate Practice

DAP needs to be implemented into every preschool classroom to give children the best opportunity to succeed in the future. Teachers have varying education degrees (Han & Neuharth-pritchett, 2010), however, DAP has persisted to be a critical in education. Mohamed and Al-Qaryuti (2016) researched the impact of preschool teachers DAP beliefs and developmentally appropriate classroom practices. Previous research studied on this topic and found mixed results on the relationship of teachers' philosophies compared to implementation of classroom practices. Mohamed and Al-Qaryuti (2016) compiled data from a random selection of around 60% of preschool programs in Musact, Oman. Two-hundred sixty-four preschool teachers participated in two questionnaires after signing consent forms (Mohamed & Al-Qaryuti, 2016). The average age of a teacher was 26 with three to fifteen years of experience (Mohamed & Al-Qaryuti, 2016).

Researchers documented the gender of most teachers in Oman are female (Mohamed & Al-Qaryuti, 2016).

The approach used two different scales: Teacher Beliefs Scale (TBS) and Instructional Activities Scale (IAS) to rate teacher's acceptance of DAP and embedded practices. The TBS survey had 36 questions regarding developmentally appropriate and inappropriate beliefs on a

five-point scale ranging from (1) not important at all to (5) extremely important (Mohamed & Al-Qaryuti, 2016). The IAS had a similar five-point scale, but instead it ranged from (1) almost never to (5) very often and required 34 questions to be answered (Mohamed & Al-Qaryuti, 2016). The validity of the questionnaire was tested. Two questions were removed from the TBS and three questions removed from the IAS to improve the validity of the model (Mohamed & Al-Qaryuti, 2016).

Results from the quantitative research indicated teachers' beliefs about DAP are very strong (Mohamed & Al-Aaryouti, 2016). Researchers described DAP practices as observations for assessment, personal relationships, and child-directed activities (Mohamed & Al-Aaryouti, 2016). The IAS scale that analyzed teachers' practices resulted in self-recorded DAP to be average to high (Mohamed & Al-Qaryuti, 2016). Preschool teachers' beliefs of DAP are higher than actual classroom practices. Similar results occurred in other studies relating reported practices lower than teachers' beliefs of DAP (Mohamed and Al-Qaryuti, 2016). The discrepancy between belief to practice shows a gap, negatively affecting the quality of experiences children receive. Researchers indicated that preschool educators in the Omani area are most often high school graduates without a college degree (Mohamed & Al-Aaryouti, 2016).

Predictions made on self-reported practices and teachers amount of experience were made. The more experienced teacher would result in an increase of DAP. Teachers are not trained or have an education degree after high school to effectively implement DAP, but four out of five subscales from the IBS demonstrated that teachers are implementing a DAP curriculum (Mohamed & Al-Aaryouti, 2016). Evidence of teacher's classroom practices is needed in a future study to determine if the self-reported practices of DAP occur. The gap in teachers

successfully self-reporting use of DAP is lower than beliefs, therefore, further analysis of professional development opportunities must be discussed to improve classroom practices.

In another study, researchers Han and Neuharth-Pritchett (2010) examined how the varying of levels of education compared to self-reported beliefs of DAP. The sample included 62 total participants, 35 lead teachers and 27 teacher assistants ages 25-59 (Han & Neuharth-Pritchett, 2010). Ethnic background was not disclosed by four participants; however, identification of most lead teachers was white while most paraprofessionals self-identified as African American (Han & Neuharth-Pritchett, 2010). Education levels varied between the participants. The state in which the study was conducted required lead teachers to have a minimum of a 4-year college degree. From the 35 total lead teachers, 15 (42.9%) had a minimum of a 4-year college degree and 20 (57.1%) had a graduate degree or higher; and zero of the 27 teacher assistants identified as having a 4-year degree. (Han & Neuharth-Pritchett, 2010). There was not a significant difference between the years of experiences for lead or assistant teachers.

The instrument used to collect data was the Teacher Attitude Inventory. A scale (one to five) was used to state agreement or disagreement with DAP and developmentally inappropriate practices (Han & Neuharth-Pritchett, 2010). Participants answered 26 questions on both scales (Han & Neuharth-Pritchett, 2010). Between the two scales, reliability was .88 and .85 from the sample of data and validity ranged from .78 to .83 (Han & Neuharth-Pritchett, 2010).

Researchers analyzed the group results and broke it down into two categories (lead teachers and assistant teachers). Results demonstrated differences in the opinions of lead teachers and teacher assistants on DAP and developmentally inappropriate practices. First, lead teachers had stronger beliefs on the DAP scale (Han & Neuharth-Pritchett, 2010). Second, teacher assistants had a stronger belief towards developmentally inappropriate practices (Han &

Neuharth-Pritchett, 2010). Items on the questionnaire involved behavior management, classroom management and academic content. Paraprofessionals answered questions that included the use of worksheets and spending additional time outside of school to tutor preschool children more appropriate on the scale, however, these practices are developmentally inappropriate for preschool aged children (Han & Neuharth-Pritchett, 2010). Assistant teachers' beliefs toward giving homework for the age-group was rated high on the DAP scale (Han & Neuharth-Pritchett, 2010), but this was another inappropriate practice. Overall, the mean scores between lead teachers and teacher assistants was .3 to .96 standard deviations apart (Han & Neuharth-Pritchett, 2010). It is not a large difference, however, results revealed lead teachers were more educated on DAP.

Limitations do occur in this study. Researchers used a small sample of participants from one state. The focus group of lead teachers all had a college education of four years or more. This is not accurate for all early childhood lead teachers in the United States. In both Han, Neuharth-Pritchett (2010); Mohamed and Al-Qaryuti (2016) studies, data completed was based on teachers' beliefs rather than data on observations of classroom practices. A teacher's belief of DAP could be much stronger than actual practices. Varying levels of education impacted participants knowledge about DAP.

Meaningful Observations and Documentation

Observation is a way for early childhood educators to understand a more complete picture of a child's developmental domains as the child complete tasks and function in the natural environment (Dennis et al., 2013). Evaluation of a child's motor skills, social skills, language skills and cognitive skills can be assessed through observations where a child spends significant amounts of time (Dennis et al., 2013; Macy et al., 2016). Macy, Bagnato and Gallen

(2016) discussed how the implementation of play in a curriculum gave teachers an opportunity to sit down and document meaningful observations of skills demonstrated by a child.

Developmentally appropriate teachers use observations as a tool to create intentional lessons from the information learned (Cobble & Bredekamp, 2009).

Meaningful observations directly embedded into children's daily routine supports educators to watch of children preform skills. Pool and Hampshire's (2019) research examined the effects of planning for unstructured and structured observational assessment. In the qualitative analysis, a male teacher from an urban area was interviewed to explain how to prepare for authentic assessment (Pool & Hampshire, 2019). Unstructured observations are naturally completed in the environment to gather evidence of a child's skills (Pool & Hampshire, 2019). Structured observations are activities planned by a teacher to identify development of a specific skill that reveals indirect evidence of children's knowledge (Pool & Hampshire, 2019).

In an interview, the teacher discussed how preparing an environment to gain efficient evidence led to meaningful observations (Pool & Hampshire, 2019). An effective teacher understands the importance of planning meaningful observations to expand children's early learning skills. Researchers discussed how teachers often observe play or during daily routines, however, documentation is not used to record (Pool & Hampshire, 2019) information gathered from the observation. Documentation is evidence to reflect upon to make further instructional decisions (LeeKeenan & Ponte, 2018).

An example of a teacher's planning form to record planned observation was documented by a spreadsheet in the study. Rows had five assessment areas (cognitive, motor, adaptive, social, and social communication) with subcategories to break down developmental objectives for each domain (Pool & Hampshire, 2019). Columns on the spread sheet were labeled: child, activities

and routines, materials needed, adaptations to environment (structured plans), and the observer (Pool & Hampshire, 2019). The organized form supported the teacher to be specific in the collection of data.

Observations are used in the decision-making process (Pool & Hampshire, 2019). Mr. Jeremy, the teacher interviewed, explained how to use observations to be intentional to plan and foster growth in different developmental areas (Pool & Hampshire, 2019). One example on the planning form documented a child's favorite toys (tools and cars) to be purposefully placed in the environment (sensory bin) to assess qualitative and quantitative math concepts (Pool & Hampshire, 2019). Background knowledge of the child's preferences and interests were intentionally used to engage a child while the teacher collected specific information on the objectives. Effective teachers build relationships with children to organize the environment with meaningful materials to promote growth (Cobble & Bredekamp, 2009).

The qualitative approach used to gather data showed another example of how authentic observations supported the teacher to meet a learner's needs. A girl in the classroom was over stimulated by the noise and routine of snack, therefore, left the area to sit alone (Pool & Hampshire, 2019). Documentation and reflection of meaningful observations during this part of the day lead the teacher to make structural changes at snack time to accommodate the child to be with a couple peers comfortably at a table (Pool & Hampshire, 2019). The teacher adapted the environment for a different child based on observations that occurred during times of transitions. This part of the day was negatively impacting a child to move on to the next activity on the schedule (Pool & Hampshire, 2019). Implementing visuals into the daily routine to prepare the child for transitions was part of an intervention plan that ended up being successful for the child. Meeting the needs of learners is a critical DAP (Copple & Bredekamp, 2009). The teacher in this

study demonstrated the importance of using documentation to inform teaching changes to foster children's growth through the examples stated in the study.

A limitation of the approach was the participant sample size time (Pool & Hampshire, 2019). This study does support the research question of this literature review as the practices used were developmentally appropriate to foster healthy development of the children. However, only one teacher's use of authentic observational tools does not provide enough evidence if this is an effective approach.

On-going Documentation versus a Standardized Approach

The method of on-going documentation validates educators' purpose of intentionality. On-going documentation monitors a child's progress and guides educators to support optimal growth and development (Macy et al., 2016) throughout the year. *NAEYC's Position Statement* described three terms for effective assessment of young children: on-going, purposeful, and strategic (NAEYC, 2009). Daily documentation monitors and provides reliable data of an individual's understanding of concepts and developmental progress (Copple & Bredekamp, 2009; Macy et al., 2016). Children rapidly learn. Effective teachers accommodate and implement purposeful learning experiences based on children's demonstration of skills from on-going documentation.

Standardized Approach

In contrast to on-going methods of assessment, educators use standardized assessments to determine a child's skills. Summative tests in early childhood are formal and may address further evaluation based on norm-referenced scores (McAfee et al., 2016). The snapshot test of a child's performance may not reflect the child's full capabilities, flawing the data (Macy et al., 2016). The National Reporting System (NRS) is one example of a standardize assessment tool used in

early childhood. The NRS was used nationwide from 2003 to 2007 in Head Start programs to formally assess four and five-year-old children (Kim, 2016). An unfamiliar assessor pulled children out of the classroom to test knowledge on the English language, receptive vocabulary, upper- and lower-case letters and mathematic concepts, two times a year in the fall and spring (Kim, 2016). Multiple items under each category were assessed and a summary report was created. Reports of children's results came months after the assessment was completed (Kim, 2016). Effective teachers use data from assessments directly to plan and prepare lessons in areas necessary for children's growth. Without immediate feedback of the results or a familiar classroom teacher administering the exams, summative assessments do not support strategies of using assessment to immediately foster children's development of skills. Kim (2016) mentioned this standardize test was stopped in 2007 due to content labeled inappropriate in the areas of developmental and cultural.

Teaching Strategies Gold

Teaching Strategies Gold (TSG) is an on-going assessment tool that Head Start programs used to document children's current developmental status (Kim, 2016). The objectives in the assessment system link to early learning standards that break down sequential developmental milestones for three to five-year-olds. A report provides information of a child meeting or not meeting a developmentally appropriate objective (Kim, 2016). TSG is promoted to be an easy, data system where teachers compile data on 66 objectives to rate children's knowledge and skills using a number system (Kim, 2016). The tool was created to be authentic using ongoing observations to have a full view of a child's development (Kim, 2016) after the misuse of the NRS assessment.

In 2016, Kim designed a qualitative research study that examined how a teacher's curriculum choices are impacted daily through assessments. DAP discuss how assessments informs teaching and give information to families (Cobble & Bredekamp, 2009). Four Head Start classrooms in the Midwest were used for data collection (Kim, 2016). Classroom teachers participated in three lengthy interviews, supervisors from each Head Start were interviewed and personal observations by researchers were used to collect the sample (Kim, 2016). Data was accumulated over a five-month period as the researcher observed the four classes two times a week for three and a half hours (Kim, 2016).

Teachers, who had firsthand experience using the TSG, expressed opinions about the assessment tool in the study (Kim, 2016). One preschool teacher stated how the tool organized the developmental domains and used color codes to identify if a child is meeting a standard or not yet (Kim, 2016). This allowed the teacher to recognize which children needed further skill development in an area. Another teacher mentioned how individual instruction was an outcome from using the assessment tool (Kim, 2016). Knowledge of a child's current skill level gave the teacher knowledge of what lessons to plan to encourage progress in areas highlighted. A third teacher discussed how TSG gave teachers a phrase of below, meeting, or above age level after inputting data (Kim, 2016). Looking at an overview of the documentation tool allowed teachers to understand individual's development based on data input into the system. A feature of TSG liked by teachers was library of resources that gave next step activities to boost children who needed help on individual objectives (Kim, 2016). Teachers did not have to create new lessons because the system gave ideas and resources.

Teacher's stated positives from using the TSG system for a year, however, concerns were expressed (Kim, 2016). The amount of time spent documenting and collecting evidence was

exhausting the teachers. Most of the day was spent documenting and inputting data, leaving a little amount of time to individually plan experiences to further develop areas of concern. (Kim, 2016). To input data on some objectives, teachers had to organize play scenes or activities to observe children's skills. This impacted natural, spontaneous observations that was indicated the purpose on-going documentation of TSG assessment tool (Kim, 2016).

Another large concern teachers voiced was the frustration of using the library to find activities to further support development of skills children had not met (Kim, 2016). Kim discussed TSG's promotion of the activity library to be easily accessible (2016). Opinions from this study did not prove that TSG is an easy way to document from the teachers. An organized system to store evidence to determine if a child is meeting a standard or not was beneficial, however, the lack of time to effectively use the data to inform planning of lessons does not support the appropriate practice of using assessment. DAP of assessment involves teachers using data to enhance and inform the future teaching (Cobble & Bredekamp, 2009). Limitations to the research completed is the limited number of participants interviewed. Data was collected from a small selection based on personal opinions teachers who used this assessment tool for only one year.

Partnerships with Families

The "Early Childhood Curriculum, Assessment and Program Evaluation," discussed how communication with child's caregivers about developmental skills is useful way to gain meaningful information about a child (2003). Caregivers interact with children in familiar contexts, allowing children to demonstrate skills in front of familiar people. The collection of evidence obtained from conversations with families in addition to at school observations can be used to create a plan for future instruction and goal setting (Macy et al., 2016). A study

completed looked at a child who was transitioning from home-based intervention services to a public preschool. It resulted in understanding the importance of an established partnership with the family to support the child at school appropriately.

Turan and Meadan's case study in 2011 analyzed the value of social validity of assessment for children in special education. Social validity related to natural environmental assessments and use of information from a child's intervention team to guide a developmentally appropriate plan for a child to have success. It included three main parts: establishing goals, intervention, and an outcome (Turan & Meadan, 2011). The team that partnered together included parents, caregivers, therapists, teachers, and a representative from the school district (Turan & Meadan, 2011). The first step in the process was creating goals for the child.

The role of the family is critical in the process of gathering information (Turan & Meadan, 2011). Parents or caregivers have known the child the longest, therefore, assistance in creating a plan to reflect the goals parents want for child's progress is essential. Input of child's current development in the home environment, strengths, areas of concern, considerations and accommodations are all important pieces of information the team gathered to make the transition successful (Turan & Meadan, 2011). Families are not always familiar with developmental milestones (Goldstein & Flake 2015), but establishing relationships builds trust and partnership.

In Turan and Meadan's study, different methods of authentic assessment occurred in the child's home to gain knowledge on the child's current development (2011). Interviews, rating scales and an observation occurred in the process to gather a complete picture of the child's developmental skills (Turan & Meadan, 2011). In the case study, an area the child was still developing in was feeding. Communication on how important it was for the child to be independent eating, the family's culture impacts of mealtime and appropriate types of utensils

the child could use at school were discussed (Turan & Meadan, 2011). An intervention goal was created for the child to work at becoming independent during mealtime in the classroom.

Teachers were required to collect data on the intervention to evaluate the child's progress on the specific goal (Turan & Meadan, 2011).

At school, data recorded the child was eating independent as the goal stated, however, the parents voiced the concern of weight loss due to the method used at school. This study revealed the importance of a partnership with the family to modify or update interventions with home progress and school development (Turan & Meadan, 2011). An outcome for this goal was changed to meet the families worry. Outcomes for goals are all achieved in different amounts of time dependent on individuals (Turan & Meadan, 2011).

This case study demonstrated how DAP of authentically assessment to gain knowledge of a child's skills and the value of a partnership with a family work together in achieving goals for a child. The social validity of assessment provided teachers to make realistic goals for skills or targeted behaviors based on observations of a child in the natural environment. Families provide valuable perspective that teachers need understand and support children at school. The partnership in this study identified the importance of communication with a family to be involved in creating goals for the child to be successful at school and home. Limitations included the individual case study of one family's experiences with the transition from home-based services.

Assessment in Early Childhood Education

The purpose of assessment is to inform educators of appropriate curriculum choices for individual learners (Banerjee & Luckner, 2012). Different methods are required by programs, curriculums, and school districts. An evaluation of children's skills and behaviors from

assessment methods (Banerjee & Luckner, 2012) guides teachers to implement to lessons to extend children's knowledge. High-quality preschool programs use assessment to respond to children's current skill level and scaffold learning to further develop and master skills (Cobble & Bredekamp, 2009). Early interventions, eligibility of special education services, monitoring identified goals and planning of curriculum instruction are all informed by assessments (Banerjee & Luckner, 2012).

Educators Experience Assessing Children

Research was completed to better understand educators' experiences and challenges with assessing children. A panel of five experts created a survey to collect data in five areas: demographic background of educators, current methods of assessment, completed professional development for performing assessments, training needs on assessment; and an open ended section on current challenge and needs of training (Banerjee & Luckner, 2012). The sample involved 543 participants, with 51% special education teachers or interventionist (Banerjee & Luckner, 2012). Ninety-eight percent were women and 99% of the participants primary language was English (Banerjee & Luckner, 2012). Self-identity revealed participants to be African American, Asian, Hispanic, White, and other; however, 86% of the sample identified as White (Banerjee & Luckner, 2012). The largest percentage of years of experiences was teachers with over 15 years (Banerjee & Luckner, 2012).

Standardized tests and non-standardize methods of assessment are being utilized by professionals for development areas of early literacy, adaptive knowledge, language and communication, motor, social, math and science (Banerjee & Luckner, 2012). The *Battelle Developmental Inventory* was the most used standardized test (Banerjee & Luckner, 2012). The top five authentic assessment types included observations, play-based, communication reports

from families, checklists for developmental items and teacher creative inventories (Banerjee & Luckner, 2012). A percentage of how often teachers use standardized methods verse authentic was not shown, however, 96% of the teachers use evidence gained from assessments to plan goals related to children's development. A developmentally appropriate teacher needs to use information from assessments to plan activities to promote development.

Another survey area documented participant's top three areas of training needs. The analysis ranked the top five areas teachers would like training on. Results included (1) choosing a tool that is appropriate for completing an assessment; (2) further education and resources on assessing children with diverse, cultural backgrounds; (3) learning on assessments that are developmentally appropriate; (4) the process of making modifications during assessments for children with cultural backgrounds and children with disabilities; and (5) planning instruction from the assessment results (Banerjee & Luckner, 2012). The indication of future education in performing appropriate assessments for this age level was an arching theme from the responses. Confidence on self-rated knowledge to appropriately implement assessment tools was 73% and 58% indicated prior training in the assessment tools to be effective (Banerjee & Luckner, 2012). Not all participants felt comfortable in conducting assessments.

A qualitative approach was used to gain short answer responses of participants top challenges or barriers with assessing early childhood aged children. The top answer by 71% of the sample was lack of time to preform assessments (Banerjee & Luckner, 2012). The second biggest challenge reported was inefficient appropriate tools to assess (Banerjee & Luckner, 2012). Results emphasized training is needed for adults in the field. Riley-Ayers (2014) stated the need of professional development in assessment is necessary for assessors in the field as well as the people mandating the tests to understand the length of time needed for assessments to be

completed. This was an accurate outcome for Banerjee and Luckner's (2012) research too. A limitation in the sample was lack of access to the survey due to the completion of it in an online format.

Early Childhood Intervention Specialists Assessment

Early childhood interventionists and early childhood therapists use assessments to identify early interventions. Early childhood assessments are completed by a team or group of educators that specialize in each developmental domain. Keilty, LaRocco and Casell (2009) researched authentic assessment strategies from the perspective of early childhood interventionists. In the qualitative approach, 73 opinions and experiences of interventionists were gathered during group interviews to identify the value of authentic assessment from seven agencies that included private and public sectors (Keilty et al., 2009). All participants were female and 93% identified as white, non-Hispanic (Keilty et al., 2009).

Assessment is used to plan and scaffold instruction; however, it used to determine if a child qualifies for additional intervention services and evaluate eligibility of special education (Banerjee & Luckner, 2012). Authentic assessment was researched to further investigate the process of determining eligibility for interventions in place of standardized tools (Keilty et al., 2009). Findings showed that participants viewed authentic assessment methods valuable to understand developmental impact of the environment and learning through progress monitoring (Keilty et al., 2009). The sample indicated being more comfortable monitoring children's progress to share with families, however, barriers with solely using natural assessments was explained to be difficult to determine children's eligibility (Keilty's et al., 2009).

One challenge the interventionist faced was the validity of information obtained from families on the child's development during interviews to gather information about the child

(Keilty et al., 2009). Copple and Bredekamp (2009) discussed the importance of building rapport with families to have two-way open communication as a DAP. The time interventionists are given to complete the portion of the eligibility process did not offer enough time to build relationships with families or only use authentic methods to observe the development of a child's skills and behaviors (Keilty et al., 2009). Interventionist are trained in one area of expertise, therefore, knowledge about the other domain is not present to gain a full authentic assessment from one assessor (Keilty et al., 2009). Authentic observations do occur for sections of the evaluation, however, standardize measures were a preferred method of the initial eligibility (Keilty et al., 2009). The term authentic was new to a portion of the participants but was identified as used and appreciated when collecting day to day data to monitor progress (Keilty et al., 2009).

A limitation existed in the study. The information was gathered in group interviews; therefore, all participants might not have felt comfortable sharing individual opinions in front of others (Keilty et al., 2009). Additionally, only seven agencies were used in the data. This limited amount does not explain how other agencies or groups may use authentic and standardize methods of determining children's eligibility of intervention services in different states.

Authentic Assessment

The best way to obtain information about a child is to talk, listen to, watch, and examine work samples (McAfee et al., 2016). Every minute of the day provides teachers opportunities to analyze children interact in the environment. An assessment is a sample of data that should reflect a child's capabilities (McAfee et al., 2016). It may include verbal or nonverbal evidence (McAfee et al., 2016) and use multiple sources to gather information (Dennis et al., 2013). Authentic assessment provides evidence of a child's ability over the length of time. Authentic

assessment can take place during snack, on the playground in the classroom or in the hallway (McAfee et al., 2016). It is not limited to one place where observations or documentation must occur. McAfee, Leong and Bodrova (2016) indicate the purpose not only to progress monitor children's skills, but also to identify children who could benefit from additional support. Heidemann and Heewitt (2010) stated authentic assessment provide teachers with rich information.

Validity of Authentic Assessment

In 2014, a social validity research study focused on authentic assessment measures (Bagnato et al., 2014). The sample size was initially 1,445 participants, however, due to uncompleted sections, 969 individual's data was used (Bagnato et al., 2014). Twenty-eight males and 637 males from 22 different states identified job as a lead teacher, assistant teacher, itinerant staff member, administrator, supervisor, therapist, researcher, or other (Bagnato et al., 2014). A large population of the sample (92%) identified as 46 to 55 years old and stated race was white. The approach used a quantitative method to gather data.

LINK ratings were used to acquire consumer quality (Bagnato et al., 2014). Eight measurements of quality were measured: acceptability, authenticity, collaboration, evidence, multifactor, sensitivity, universality and utility; to compare standardized and authentic assessment measures (Bagnato et al., 2014). Definitions of all the categories were labeled and had subsections defined for participants to use when completing the survey. The study used 80 measures of early childhood assessment, 61 were labeled authentic and 19 standardized measures (Bagnato et al., 2014). Results showed conventional testing received lower ratings than the authentic assessment in all eight areas (Bagnato et al., 2014). When comparing the means, authentic assessment had a rating of 2.87 and conventional had 2.67 (Bagnato et al., 2014). It

was indicated a more preferred method for educators and parents to use an assessment tool that looks at a child in real-life context in the natural environment (Bagnato et al., 2014). Bagnato, Goins, Pretti-Frontczak and Neisworth's (2014) study identified authentic assessment as a DAP.

Authentic Assessment Methods

Natural observations of children preforming activities the in environment directly gave teachers information about children's preferences, strengths, and areas that are difficult (Pool & Hampshire, 2019). The purpose of using the environment to gain insight on a child's response to routines assists teachers to plan intentional future activities to foster growth based on obtained findings. If a child has does not have the skills to ask for a material in the block center so takes from others, an observation will identify the teacher could scaffold learning on how to ask a friend for a material. Observations, running records, developmentally checklists, anecdotal records, (Dennis et al., 2013), videos and pictures are all different tools can be used to authentically acquire information (McAfee et al., 2016).

Researchers completed a study to understand how to appropriate assess a child transitioning to a public early childhood program from early childhood intervention information (Dennis et al., 2013). Rather than standardized measures, the team used a variety of authentic documentations to understand a three-year-old child's interactions in the home environment to inform teachers directly about how the child functioned. A running record, a type of authentic documentation, was used by interventionist to describe the same event two days in a row (Dennis et al., 2013). Running records document the activity being observer, participants, the date and time, location and finally the events that occurred (Dennis et al., 2013). It describes facts that happen rather than opinion statements of what the observer thinks is happening. Information gathered from the running record on the first day indicated a language sample, indication the

child knowns there is a j in his name and an interest of book topics (Dennis et al., 2013). The second day when the same scenario occurred, however a book was chosen by the parents and the child did not participate in the activity. It is reported that when the parents allowed the child to pick the book, then the child was compliant (Dennis et al., 2013). This form of documentation for the observation helped teachers understand behaviors that occurred when the child did not have a choice in the activity.

A sample of an anecdotal record was also recorded in the study to determine appropriate goals for the child in public school. This method of documentation reported the activity, participants, date, length of observation and an analysis. Researchers documented a scenario where the parents invited the child to play playdough and make snakes, an interest of the child. Non-compliance occurred from the child for the first several minutes, before the child took play dough from the table to another spot to play by himself (Dennis et al., 2013). The teacher analyzed the observation and the child's current skills and indicated the child would benefit from practicing turn taking, play transitions, compliance to requests and requisition materials (Dennis et al., 2013). This important information would not have been gathered from a standardized method of assessment to create a goal from. Factual observations and documentation leads teachers to learn more areas of growth to plan lessons for (Dennis et al., 2013). For this specific study, the developmental areas of social-emotional, behavior and language areas were informed from the two observations (Dennis et al., 2013). A play-based assessment was also used as an authentic measure. It was identified the child's cognitive skills were above average, the child struggled to effectively communicate needs, wants and emotions, transitions were difficult and social skills needed intervention (Dennis et al., 2013). The evidence provided teachers to move

forward make a plan to meet the areas the child had not developed and use modifications to support the child in preschool.

Documentation

Documentation provides a framework for teacher to organize and record observations (Heim et al., 2007) as evidence to interpret and share (Leekeenan & Ponte, 2018). Teachers can see children's progress and learning using documentation (Helm et al., 2007). Multiple methods of recording data are used to write down evidence. Documentation is a powerful tool for teacher to self-reflect (Helm et al., 2007). Effective teachers need strong documentation skills to use the evidence to inform planning procedures. Complied documentation can reveal patterns, show the learning progress, and assist teachers to see developmental progress in day to day interactions (McAfee et al., 2016). Researchers have concluded teachers have 1,500 interactions with children each day (McAfee et al., 2016), therefore, documentation is important for teachers to use to remember interactions.

Anecdotal notes

Anecdotal notes are a form of documentation that include short notes on an event that occurred (Bates et al., 2019; McAfee et al., 2016). Bates, Schenck and Hoover describe this form to be neutral in opinion and state a child's interactions and behaviors (2019). Recording words stated by child and factual observations is critical to this recording method (Dennis et al., 2013; McAfee et al., 2016). Often, abbreviations are written to make notes more efficient (Bates, et al., 2019). Date, time, and area of the environment is information to include on the document (Dennis et al., 2013).

Checklists

Checklists are a form of documentation for teachers to use to record skills, behaviors, or work products (McAfee et al., 2016). This form is versatile for teachers to modify dependent on the skills being observed. Teachers can use checklists for all developmental areas to reflect on children who are completing the standard or objective or not (McAfee et al., 2016). During group time, a teacher may use a checklist to record children who answer questions. Checklists does limit detailed information being observed.

Work Samples

Work samples are a type of documentation that display children's thought process (Helm et al., 2007) and final product. Teachers can keep children's work together in a folder or portfolio. Work samples can be compared over time to show children's progress (Helm et al., 2007). This form is unique and can reveal many developmental domains and demonstrates a project of multiple steps (McAfee et al., 2016). Work samples are shared with families as evidence.

Pictures and Videos Recordings

Other types of documentation to represent children's learning can exist as a picture or video. Documentation does not always have to come in a written form (McAfee et al., 2016). Evidence of the process is viewed through pictures. One limitation of documenting though pictures is the need to provide written details about the context of the scene (McAfee et al., 2016). Videos provide a complete record of evidence (McAfee et al., 2016) that teachers can use to self-reflect on children's skills (Helm et al., 2007). This source allows teachers to re-watch multiple times. Records of both videos and photographs can be shared with families (McAfee et al., 2016) to discuss children's progress.

Play-Based Learning

Play-based learning contributes to healthy development of children. Play enhances children's cognitive knowledge (Heidemann & Hewitt, 2010) and imagination (Bodrova, 2008) as children interact and engage in materials in the environment. Building and developing lifelong skills is important for children to learn to successfully function in the community, which goes beyond preschool. Children in primary grade levels are still developing and mastering many of these skills, therefore, it is essential for educators to create time for children to find joy in learning more about the world as they interact with others (Copple & Bredekamp, 2009).

Curiosity, creativity, and imagination are skills children demonstrate though play in an environment filled with intentional materials. Children progress as they build upon prior experiences and expand their knowledge through investigation and exploration (NAYEC, 2009). The teacher has an important role to create a space that excites and motivates children to learn naturally through materials in the environment. Heidemann and Hewitt discuss the importance to keep the environment fresh and relevant.

Effects of Play-Based Learning and Intentional Teaching

In a study related to the two practices of play-based learning and intentional teaching, researchers' findings discovered the positive significance of using both pedagogies (Thomas et al., 2011). The study was driven by observations and interviews of two teachers. The researchers recorded videos of teachers' interactions with children during play. The authors and teachers replayed videos for the teachers to describe what facilitation occurred along with the engagement of the children (Thomas et al., 2011). Opinions on the topics play and intentional teaching were defined by both teachers.

First, an analysis of play will be described. Teacher one discusses how play is a time where children have control and can independently explore the environment. There are no restrictions which allowed teachers to observe children's preferred areas without demands on where the child needed to play (Thomas et al., 2011). This teacher explained how the teacher's role in helping facilitate or assist during play to enhance children's ideas or plans extends children's learning (Thomas et al., 2011). Play is a time where teachers are involved in what is occurring in the environment and guiding children to further develop children's skills. Teacher two described play as an important role in extending children's knowledge as children learn in the environment and from peers (Thomas et al., 2011). Children's prior knowledge is shared with other children when working together with one another. An increase in communication skill was stated by teacher two as a benefit of play (Thomas et al., 2011). Guided experiences to foster learning were used by this teacher's documented observations of children playing together (Thomas et al., 2011).

Next, the focus of the interviewers was on the role of intentional teaching strategies.

Teacher one explained the importance of building upon prior knowledge to support children during independent play time with peers. Skills taught previously resulted in children being more engaged in an activity when it was placed in the environment. Also, the children had more success playing with materials or games if intentional teaching had happened before the objects were placed around the room (Thomas et al., 2011). Teacher two described how intentionally involved students in the planning process benefited the length of time children were engaged in activities (Thomas et al., 2011). Allowing children in the participate in the planning process gave children opportunities to express interests, preferences, and creativity in the materials placed in the environment.

The practices of play-based learning and intention teaching were found to both be critical for teacher to embed into the classroom to support learning (Thomas et al., 2011). The researchers did not find conclusions to either pedagogy being effective by itself. The limitation of the small sample of participants in this study used makes it difficult to determine if all early childhood teacher feel the same about the teaching strategies.

Play Fosters Growth in Developmental Domains

Play is a developmentally appropriate teaching strategy that promotes growth in the areas of self-regulation, cognitive, language, and motor development and social competency (Cobble & Bredekamp, 2009). Taylor and Boyer (2019) described play to extend children's prior learning experiences through the environment and peer interaction. Play is a child-directed activity. Research identified language to be strengthened through play (Rajapaksha, 2016) as communication through conversations and vocabulary is introduced to children (Taylor & Boyer, 2019). Through play, children practice problem solving skills (Bollinger & Myers, 2019) and learn to regulate emotions through conflicts (Heidemann & Hewitt, 2010). Play provides children opportunities to understand the world as children interact with one another (Copple & Bredekamp, 2009).

Socio-dramatic Play

Socio-dramatic play provides children opportunities to use verbal communication, roleplay, interact with peers or adults, develop and imagination and practice negotiation skills (Rajapaksha, 2016). Classrooms have an area of the room focus on a theme for children to use during play time. Vygotsky's definition of real play consisted of an imagination scene where roles were taken on by individuals and each role had a set of rules (Bodrova, 2008). The environment plays a significant role in supporting healthy development. In this center, props and costumes are available for children to engage with. Themes could include but are not limited to housekeeping, grocery store, veterinarian office, post office, bakery, or restaurant.

A negative impact in language development in preschools had been found in previous research studies due to the high demand of curriculum instruction (Rajapaksha, 2016).

Rajapaksha (2016) discovered benefits in increasing oral language through using dramatic play in preschool classrooms. Qualitative data recorded children's interactions of initiating conversations and developing longer conversations in the dramatic play area of a classroom. Ten children, three to five years-old, from a group of 50 were chosen to be the sample observed in a Sri Lanka preschool program (Rajapaksha, 2016). Instruments used for the research was observations, video recordings and an interview.

The Sri Lanka preschool program did not have a dramatic play area to prior to the research completed and teachers were not trained on how to intervene and support children's development through this type of play. The research was gathered in three weeks with 12 intervention sessions (Rajapaksha, 2016). The teacher also received training on how to facilitate the play themes (Rajapaksha, 2016). Three dramatic play themes (doctor, shop and market) were in the classroom during the period of research (Rajapaksha, 2016). Rajapaksha used four categories to rate the children's ability to engage in conversation with others (2016). The ratings were not engaging, exploring, developing, and building (Rajapaksha, 2016).

The researcher determined all the children were all at the stage of exploring in the beginning (Rajapaksha, 2016) as short phrases about the theme were communicated. By the end of the intervention, three children reached the building stage and the remaining seven improved from exploring to developing (Rajapaksha, 2016). The classroom teacher noted in a journal how children who typically did not speak throughout the day were beginning to talk while at the

dramatic play center (Rajapaksha, 2016). Conclusions from the research showed how providing children opportunities to role-play improved children's oral language and communication between children (Rajapaksha, 2016). Results of the teacher helping facilitate conversations, also influenced oral language (Rajapaksha, 2016). A limitation of the study conducted was the number of children observed and the short time frame of the intervention. Additionally, this research happened outside of the United States.

Teachers Role of Socio-Dramatic Play: In several previous studies, researchers have identified a positive connection between oral language development and conversation (Meacham et al., 2014). In 2014, a study looked at the role of the teacher participating in socio-dramatic play (Meacham et al., 2014). Specifically, how teachers used the strategy of questioning in the center enhanced language. Three Head Start programs in the mid-Atlantic region were sampled (Meacham et al., 2013). All 11 teachers were female, ten had a minimum of a bachelors degree with one working toward a bachelor degree (Meacham et al., 2013). The amount of teaching experience ranged from six months to twelve years (Meacham et al., 2013). Two-hundred one children were in the eleven teachers' classes, however, only 97 that played in the dramatic play area with teachers are identified in the study (Meacham et al., 2013).

Teachers interacted with four children or less in the dramatic play center due to the classroom rules (Meacham et al., 2013). Microphones were worn by teachers and the scenes were video recorded (Meacham et al., 2013). The time period of the research was two months (Meacham et al., 2013). Teachers utterances were organized into five categories: open-ended questions, closed-ended questions, prompted questions, non-question comments, and non-question prompts. Results showed teachers used non-question comments the most at 63.8% (Meacham et al., 2013). The second highest was closed-ended questions at 23.6% of the time.

Open-ended questions were used 11% of the time (Meacham et al., 2013). Promoted questions and teacher utterances were combined under two percent (Meacham et al., 2013). Children's response to close-ended questions was minimal due to the type of question. These utterances need to be minimal during play as children have limited opportunities to respond. Other results showed children responded to teachers open-ended questions 38% of the time. This is evidence was discussed to possibly be an effect of dual language learners in the classrooms. Although the children did not respond half of the time teachers asked open-ended questions, teachers did get responses, resulting in as positive feedback for teachers to be involved in the learning. Future studies need to look at a large sample time and the effects of teachers supporting language over a longer period of time (Meacham et al., 2013).

Literacy Development

Copple and Bredekamp discussed the importance of preschool years for the growth preschoolers of language and literacy development (2009). Previous studies have discovered a correlation between literacy-based activities and pre-reading skills in preschool and a positive relation to the environment (Baroody & Diamond, 2016). These studies encouraged Baroody and Diamond's (2016) to research how children's motivations and engagement within the environment contributed to early literacy skills. The sample participants included 167 children ages four to five (Baroody & Diamond, 2016). Researchers mailed consent forms to families from 31 different Head Start programs in the Midwest (Baroody & Diamond, 2016). Fourty-nine percent of families returned the consent, agreeing to participating (Baroody & Diamond, 2016). Baroody and Diamond also recruited participants in person (Baroody & Diamond, 2016). Two data points occurred for the study in the fall and spring (Baroody & Diamond, 2016).

Researchers used different methods to conduct data. A questionnaire completed by

teachers, assessments of children's literacy skills and observations of play and large group was included in the data (Baroody & Diamond, 2016). Standardized assessment tools were used to collect the data of different literacy skills. The Early Language and Literacy Classroom

Observation was used to rate the environment, Woodcock Johnson-Picture Vocabulary subtest was used to rate children's expressive knowledge, WJ III ACH-Letter-Word Identification subtest was used to rate children's letter knowledge, Phonological Awareness subtest of the Test of Preschool Early Literacy was used to rate children's phonological awareness and a six item questionnaire was filled out by teachers on each child (Baroody & Diamond, 2016). Researchers observed each child for 15 seconds 40 times over a two-day time period and indicated how engaged the child was on an engagement scale of zero to four (Baroody & Diamond, 2016).

Results from the study indicated a positive correlation between the environment and the teachers report of the children's engagement and interest (Baroody & Diamond, 2016). The effects of the print rich environment were not correlated to group time, however, the researchers observed that letter knowledge and phonological awareness interest was significant during group time (Baroody & Diamond, 2016). Eighty-four percent of the time children were engaged in large group lessons according to Baroody and Diamond (2016). Observations during free play did not lead to a correspondence with children's letter knowledge, phonological awareness or letter-word knowledge (Baroody & Diamond, 2016). Around half of the children participated in literacy activities during free play, however, it was difficult for the researchers to determine what was and what was not a literacy activity (Baroody & Diamond, 2016). This was a limitation to the study. Additionally, bias could have existed with observers making a judgement on if the activities were literacy related or not. The teachers' survey on child engagement could also result in bias (Baroody & Diamond, 2016). Overall, the researchers suggested children are more likely

to have pre-reading skills in an environment that is filled with literacy opportunities (Baroody & Diamond, 2016).

Writing Development

A component of pre-literacy skills in early childhood is pre-writing. Preschool environments need to encourage children to engage in early writing. A study completed by Bollinger and Myers (2019) discussed the importance of integrating materials in aclassroom to develop writing and literacy skills. The sample included two classrooms (blue and yellow) of 15 four-year-old children that attend a preschool at a university located in a southeastern state over the course of 12 months (Bollinger & Myers, 2019). Researchers observed in classroom for a total of 39 hours (Bollinger & Myers, 2019). As the study was over a long length of time, rapport was built with children and teachers in the two classrooms.

Researchers identified teacher's strategy of intentionality to be present with the materials placed in permanent and temporary spots around the classroom (Bollinger & Myers, 2019). One classroom teacher discussed how re-arranging the environment and materials led to an increase of children participating in authentic writing experiences (Bollinger & Myers, 2019). A boy observed, who typically did not engage in writing, brought a rock with his name on it to a center created where children could lay down and write on paper taped under the table (Bollinger & Myers, 2019). This demonstrated the significance of re-arranging the environment. Another small group in the dramatic play area needed a sign for the shop, therefore, used writing materials and hung the sign (Bollinger & Myers, 2019). Teachers who had an open policy for children to use writing materials beyond the writing center provided children additional opportunities to practice literacy skills.

Mailboxes were a feature in both yellow and blue classrooms for children to write notes to one another or family members. The yellow classroom teachers used the environment to encourage writers by placing materials around the room, where the teachers in the blue classroom used more prompting of using the materials to expand on what the children were playing (Bollinger & Myers, 2019). An example on teachers developing children's writing was presented when children were playing a superhero game. One of the teachers who was observing the children, joined the group and had the children explain what was happing in the scene while the teacher drew it out. The teacher was demonstrating how children can draw out stories to connect with the play (Bollinger & Myers, 2019), another way to support children practice fine motor development and build a connection to write a story.

Development of writing occurs in different stages, however, the teachers observed in the two classrooms had opportunities for children to engage in material to promote pre-writing. One source that was always available for children were rocks with each students' name (Bollinger & Myers, 2019). This material was able to be brought around the room for children to refer to and use when practicing writing names. Teachers also stated the importance of placing different materials in the environment to enrich writing experiences instead of using worksheets to develop pre-literacy skills (Bollinger & Myers, 2019). The findings from this study demonstrate the authenticity of creating an environment that fosters children to develop writing through the intentionality of placing specific materials around the room and frequently changing centers for new writing opportunities.

Free Play Verse Play-Based Learning

A qualitative study over the course of five years was completed in Canada to research the play-based learning philosophy in 15 different classrooms (Pyle & Danniels, 2017). The sample

included suburban, large urban and small urban school districts (Pyle & Danniels, 2017). The data in this study was gathered from kindergarten classrooms where seven teachers had attended some training on play-based learning, two teacher were taking classes about the subject and six teachers had not been trained on play-based learning (Pyle & Danniels, 2017). A variety of methods were used to gather data in over two different phases which included: pictures, interviews, observations, videos and notes (Pyle & Danniels, 2017). The first phase studied the play in each class and coded activities to inform phase two where five categories of play were determined (Pyle & Danniels, 2017).

Results indicated 86% of six teachers classroom observation entries focused free play, where teachers had little involvement in the play (Pyle & Danniels, 2017). Teachers explained how free play gave children an opportunity to be involved in learning instead of directing the play if the teachers were involved (Pyle & Danniels, 2017). Concerns were vocalized on how to continue a curriculum driven by the children's learning when making plans for the curriculum to meet standards (Pyle & Danniels, 2017). The other nine classrooms implemented play to support children's growth of developmental domains as the teachers were involved in guiding and modeling play (Pyle & Danniels, 2017). Teachers tried to balance the curriculum through using materials children were interested in. In this group, different types of play occurred beyond free play: inquiry play, collaborative play, games, directed activities (Pyle & Danniels, 2017). A debate between the teachers on the affects of child-centered verse child-directed was addressed. Researchers explained the city this study took place in determined teachers needed to integrate academics through play-based learning after the study (Pyle & Danniels, 2017). Limitations existed in the study. With qualitative measures bias can occur. Also the collection of data is from one area in Canada (Pyle & Danniels, 2017).

Conclusion

The analyzed research in this chapter targeted purposeful studies on assessment and play-based learning in early childhood. Authentic assessments have identified as developmentally appropriate for teachers to embed into daily routines (Pool & Hampshire, 2019; Dennis et al., 2013; Banerjee & Luckner, 2012). The information gained from real-life contexts lead teachers to plan a curriculum to scaffold and foster individuals' growth. Assessments completed appropriately provided educators to view a complete picture of a child's current development from documentation collected in meaningful and on-going way (Macy et al., 2016). Research on natural observation of children's development has been linked to preparing intentional activities from documentation of monitoring progress in developmental areas (Kim, 2016).

Play-based learning is a way for children to demonstrate skills and knowledge in a natural environment without demands. Research was evident in showing play supports children's developmental domains (Bolling & Myers, 2019; Rajapaksha, 2016; Taylor & Boyer; 2019). A rich environment provides children opportunities to explore, create and manipulate materials to expand current knowledge through hands on investigation. Play is motivating, engaging and allows children to make connections (Macy et al., 2016). Teachers become researchers when play is embedded into the daily routine to authentically document evidence of children's skills and behaviors. Effective teachers implement developmentally appropriate practices to support optimal growth and development (Cobble & Bredekamp, 2009). Research in the next chapter will summarize results from this chapter to describe the need of DAP in preschool classrooms to foster children's development.

Chapter Three: Research Summary and Conclusions

Developmentally appropriate practices (DAP) play a critical role in fostering healthy development in preschool children (NAEYC, 2009). Assessment is a practice that needs to be implemented into classrooms daily to monitor children's progress. The type of assessment teachers use is critical to appropriately individualize planning and implementation of future lessons to meet the needs of the learner. Authentic assessment is an on-going (Bagnato et al., 2014) observation that gathers data about a child's ability to demonstrate knowledge during daily routines without the support of a teacher to inform planning processes (Dennis et al., 2016; Pool & Hampshire, 2019).

Play-based learning is the other developmentally appropriate practice examined in this paper. Play provides children learning opportunities to interact through exploration and discovery to expand cognitive knowledge along with other developmental domains (Rajapaksha, 2016). Research has identified the positive effects of play on a child's development (Bolling & Myers, 2019; Taylor & Boyer; 2019; Rajapaksha, 2016; Heidemann & Hewiett, 2010). The research analyzed in this paper focused on developmentally appropriate assessment and the role of play to answer the question: How can play-based learning with authentic assessment practices support healthy development in preschool classrooms? This chapter of the paper will follow a similar outline of the literature review as a summary of the research will be discussed in relation to the research question.

Developmentally Appropriate Practices in Preschool Classrooms

A teacher's philosophy plays a large role in contributing to children's healthy development. Developmentally appropriate practices (DAP) has been identified through research and theory (Cobble & Bredecamp, 2009) for educators to implement to support children learn

and develop. Research completed by Mohamed and Al-Qaryouti (2016) showed educators have a strong sense of belief for DAP. However, there is a gap in self-identified DAP. Teachers practices did not reveal to have as strong of equivalence as beliefs about DAP. Researchers discussed results to show teachers are aware of the inappropriate practices, but conclusions of teachers' identified classroom practices showed up as not always developmentally appropriate (Mohamed &Al-Qaryouti, 2016). Children need to be in classrooms where teachers implement DAP to promote healthy development. This study provided information on educator's informed classroom practices and understanding of DAP. Results presented a reason why this is an important topic to early childhood due to the lack of appropriate practices stated.

In the research study by Han and Neuharth-Pritchett (2010), researchers analyzed teacher beliefs about DAP and inappropriate practices in comparison to the amount of education previously completed. The data included lead teachers as well as assistant teachers because of the amount of instruction paraprofessionals teach in the classroom. Results identified lead teachers to be have stronger knowledge about DAP and were less likely to use inappropriate practices (Han & Neuharth-Pritchett, 2010). All lead teachers in this study noted to have a minimum of a four-year degree and none of the assistant teachers had a four-year degree (Han and Neuharth-Pritchett, 2010). The level of education was a factor in the discrepancy between the two groups.

Other studies indicated the need for teachers to have professional development opportunities (Bagnato et al., 2014; Banerjee, 2012; Keilty et al., 2009; Kim, 2016; Mohamed &Al-Qaryouti, 2016) to further understand and implement appropriate practices. The research from Han, Neuharth-Pritchett (2010); Mohamed and Al-Qaryouti (2016) has indicated a need for an increase in education and professional development to support early childhood lead teachers

and assistant teacher's DAP beliefs and most importantly practices. Adults work together as a team in a classroom, therefore, teacher assistants to need to be educated about best practice in preschool classrooms to support children's development.

Documentation

Documentation plays an essential role in educators understanding of children's skill level to individualize teaching. Authentic assessment in the natural environment was identified as a beneficial way to gain on-going information about a child's skills (Bagnato et al., Pool & Hampshire, 2019). Pool and Hampshire's (2019) study showed how organizing observations in a planning document effectively led to meaningful documentation of children's skills.

Documented evidence of children's skills supported intentional teaching or interventions to build upon children's current skills (Pool & Hampshire, 2019). Utilizing this approach kept the teacher accountable to observe during unstructured and structured parts of the day gain data to inform curriculum planning (Pool & Hampshire, 2019) to meet the needs of the children.

Teachers identified the process of on-going documentation exhausting, however, beneficial to individualize instruction in Kim's (2016) study. Teaching Strategies Gold (TSG) was an on-going assessment tool the teachers used for an entire year to gather data on early learning standards and objectives (Kim, 2016). TSG was promoted to make the assessment process easier as it color coded objectives, indicated if a child was meeting the objective or not and had a library of resources for the teacher to support each objective (Kim, 2016). Results from this study showed that on-going documentation provided teachers knowledge of children's developmental areas, however, the amount of work to show evidence for every objective did not allow teachers to have time to use the data to intentionally teach lessons to extend children's

knowledge (Kim, 2016). The marketing on TSG was not accurate in the amount of ease it was promoted to be (Kim, 2016).

These two studies indicated the importance of documenting children's skills for teachers to intentionally plan and deliver lessons (Kim, 2016; Pool & Hampshire, 2019). The teacher in Pool & Hampshire's (2019) study showed how organizing a document to gather data was successful. Kim's (2016) study displayed the importance of using an on-going tool to see progression and individualize instruction based on data in TSG's spread sheet. It was evident that teachers were not fully able to implement DAP with time constraints of using this tool (Kim, 2016), however, the teachers only had used the instrument for one year.

Partnering with Families

Partnerships with families on the social validity of interventions for children in special education was identified necessary in Turan and Meadan's (2011) study. The case provided evidence on the importance of planning inventions with families to gain parents' perspective on the importance of the child's goals. DAP explained teachers to recognize families background, culture, and expectations (Copple & Bredekamp, 2009) to appropriately deliver lessons to children. Teachers may observe skills that need to be targeted, however, need to know if it is a concern to the family (Turan & Meadan, 2011). The teachers in this study acknowledged the parent's goals for a child's mealtime at school and created a goal to maintain strategies until the family's concern was addressed. Partnerships with families benefit children as the team develops an appropriate plan for a child to be successful at home and at school (Turan & Meadan, 2011).

Assessment in Early Childhood Education

Assessment training needs were found to be necessary to move forwards with increased DAP in classrooms (Banerjee & Luckner, 2012, Keilty et al., 2009). An intentional curriculum is

linked from assessment and intervention (Banerjee & Luckner, 2012). Results from Banerjee and Luckner's (2012) study identified professionals to have used multiple standardized and authentic assessments. Choosing an appropriate tool to assess with was the number one response when researchers asked about professional training needs (Banerjee & Luckner, 2012). The next top two requests showed teachers want to be culturally responsive with assessments and needed further education about DAP for assessment (Banerjee & Luckner, 2012). This was a large indication that professionals are not properly educated on DAP to promote high-quality learning. Similar results were found in other studies (Han & Neuharth-Pritchett, 2010; Keilty et al., 2009; Mohamed & Al-Qaryouti (2016). Banerjee and Luckner's study (2012) also indicated that not all professionals are trained and the effectiveness of those trained was not sufficient. This is a large concern if educators are not properly trained to appropriately assess children.

Authentic assessment was found valuable to teachers and interventionists when progress monitoring children's goals (Keilty et al., 2009). Teachers involved with in intervention teams recognized authentic assessment to be helpful in the process of creating goals (Keilty et al., 2009) from observations of a child's skills. Standardized and authentic assessments are used in the assessment process to determine if a child's development is age level or if concern may exist (Keilty et al., 2009). Participants in the study identified natural observations are in place for and observation of the child and an interview with the family, however, it was difficult to determine a child's eligibility to receive additional services through all authentic methods (Keilty et al., 2009). This study showed barriers to using all methods of authentic assessment due to the accuracy of family information without established relationships and multiple interventionist involved in the assessment process did not provide strong enough knowledge in all developmental domains to assess the whole child at once (Keilty et al., 2009).

Results of the two studies identified that multiple methods of assessment are used by teachers and interventionist. Adults who complete the assessments do not feel properly trained to perform assessments (Banerjee & Luckner, 2012) or knowledgeable in all areas of development to use authentic measures to determine a child's eligibility in interventions (Keilty et al., 2009). It was evident that future training is needed for educators to feel confident in appropriately assessing children. Assessments inform teaching practices; therefore, teachers need to be educated on the topic.

Authentic Assessment

The method of authentic assessment was rated as a DAP in a study that compared the measures of authentic and conventional assessment (Bagnato et al., 2014). Authentic assessment supported a complete view of a child's strengths and weaknesses (Dennis et al., 2013) as the child interacted in a real-life context (Macy et al., 2016). Rankings of authentic received higher rankings in the eight categories that were addressed in the study, with authenticity having the highest rank (Bagnato et al., 2014). A strength of authentic assessment identified was how information was gathered from multiple sources (Bagnato et al., 2014). Parents, family members, caregivers, teachers, and interventionist all are a team to provide a child the best opportunities for education success. Dennis, Rueter and Simpson (2013) explained results from standardized methods of assessment do not provide further instruction. The purpose of assessment is to inform the planning process of instruction (Banerjee & Luckner, 2012; Copple & Bredekamp, 2009; Dennis, et al., 2013; McAfee et al., 2016; Pool & Hampshire, 2019). Teachers need to use appropriate assessment tools to drive the curriculum.

Dennis, Rueter and Simpson's (2013) study found evidence of the benefits of using multiple authentic tools to provide evidence of a child's skills. The play-based assessment

method was evident to be a strong method of authentic assessment that provided evidence of the child's cognitive and social skills (Dennis, et al., 2013) Observations allowed teachers to gain perspective of the child interacting in multiple locations. A running record indicated direct, information about the child's behaviors, communication, developmental domains, and interests (Dennis et al., 2013) as the child was in an unstructured environment. This information was found to be useful to create intervention plans specially based off the child's abilities.

This study also found interviews with families as a beneficial source of information (Dennis, et al., 2013) as it was identified in other studies (Bagnato et al., 2014; Keilty et al., 2009; Turan & Meadan, 2011).

Play-Based Learning

Play-based learning was identified as a DAP that promoted academic and social emotional development (Pyle & Danniels, 2017). In Thomas, Warren and DeVries (2011) study, research recognized the importance of play-based learning and intentional teaching together for children to construct learning. Teachers are needed to facilitate and provide learning opportunities for children to participate and become independent in (Thomas, et al., 2011). Children verbally responded to teachers who engaged in the dramatic play area of a classroom (Meacham et al., 2013). Additional research indicated that children's language and communication improved as children interacted together in socio-dramatic play (Rajapaksha, 2016). Implementing a rich environment was related to an increase of children who tried new activities. In Bollinger and Myers (2019) study, children who were not interested in writing found environmental changes to increase children's awareness to participate. Teachers who placed materials around the room supported children's development literacy skills (Baroody &

Diamond, 2016; Bollinger & Myers, 2019). These studies identified how play increased children's development.

Conclusion

The studies analyzed in this paper answered the question how play-based learning with authentic assessment practices can support healthy development in preschool classrooms. The studies determined authentic assessment to have social validity and be a developmentally appropriate assessment tool (Bagnato et al., 2014; Turan & Meadan, 2011. Teachers that used authentic methods were able to plan lessons to support children's development of skills (Dennis et al., 2013; Keilty et al., 2009; Pool & Hampshire, 2019). Children that had rich environments that encouraged play contributed to healthy development (Baroody & Diamond, 2014; Bollinger & Myers, 2019). Children's growth was identified when teachers were intentional and facilitated play (Rajapaksha, 2015; Thomas et al., 2011). Combined practices of play and authentic assessment positively supported children's development. A further discussion of the application and future studies will be identified in the next chapter.

Chapter Four: Discussion, Application and Future Studies

Play is a developmentally appropriate practice (DAP) (NAEYC, 2009) that provides children opportunities to explore an environment to gain deeper understandings (Taylor & Boyer, 2019). Early learning standards have identified developmental milestones a child should be able to demonstrate at each age level (Gronlund, 2014). Assessments are a way to identify and monitor children's progress toward standards (McAfee et al., 2016) and provide evidence if a child needs additional services or an intervention to boost development (Banerjee & Luckner, 2012). Riley-Ayers (2014) discussed the process of assessment to begin with observations that are documented and analyzed to inform planning to guide instruction. Authentic assessment supports teachers to use appropriate tools to gather information about a child's functions and behaviors in a natural environment over time (Bagnato et al., 2014). Research studies synthesized in this paper provided an introduction on using the strategies of play-based learning and authentic assessment to benefit the development of preschool aged children. The research presented limitations that should guide future studies to further analyze this topic. This chapter will recognize the gaps in the research and explore areas that could be studied.

Limitations in the Research and Future Studies

Research studies examined in this literature review isolated play-based learning and authentic assessment as septate topics. A limitation in how the two teaching strategies are connected exists. The research sample size of most of the studies was small (Bollinger & Myers, 2019; Dennis et al., 2013; Keilty et al., 2009; Kim, 2016; Mohamed & Al-Qaryouti, 2016; Pool & Hamsphire, 2019; Pyle & Danniels, 2017; Rajapaksha, 2016; Thomas et al., 2011; Turan & Meadan, 2011). Many studies involved qualitative research where bias could exist in the data obtained (Bollinger & Myers, 2019; Han & Neuharth-Pritchett, 2010; Keilty et al., 2009; Kim,

2016; Mohamed & Al-Qaryouti; Pool & Hampshire, 2019; Thomas et al., 2011; Turan & Meadan, 2011). These limitations identify a need for further examination of research.

Developmentally Appropriate Practices

Research has identified DAP for teachers to effectively create high-quality early childhood programs (NAEYC, 2009). Mohamed and Al-Qaryouti's (2016) research showed teachers believe in DAP, however, the amount of appropriate practices occurring in the classrooms was self-identified to be moderate to high. Further research needs to indicate what developmentally inappropriate methods are being used through direct observations in classrooms. Additionally, finding out why there is a gap in belief to practice. In Han and Neuharth-Pritchett's study (2010), researchers learned that teacher assistants do not have the same beliefs or education as lead teachers on the topic of DAP. A lack in education was the difference between the two groups. Research needs to be completed on professional development opportunities for programs to mandate all teachers to complete. High-quality, effective programs depend on educated and trained individuals to teach children (NAEYC, 2009; Copple & Bredekamp, 2010). This would also address how some states require teachers to have a degree and some do not (Banerjee & Luckner, 2012; Han & Neuharth-Pritchett, 2010; Keilty et al., 2009).

Assessment Measures

Research has identified challenges with assessing children (Banerjee & Luckner, 2012; Gronlund, 2014; Keilty et al., 2009; Kim, 2016). Evidence of teachers lacking confidence to understand and use appropriate assessments was identified (Banerjee & Luckner, 2012). Eighty two percent of participants in a studied identified to receive previous trainings, however, 58% identified the training was beneficial (Banerjee & Luckner, 2012). This identifies a major need of

further research and implication of professional development. Kim's (2016) studied identified teachers' opinions of the assessment tool Teaching Strategies Gold (TSG) taking large amount of time to provide evidence, taking away teachers' time to intentionally teach lessons to support children's development. Although it is an on-going assessment tool, further analysis is needed to understand if teachers should use TSG due to the limited responses of four teachers (Kim, 2016). Keilty, LaRocco and Casell (2009) addressed authentic assessments to not be effective to use to fully determine a child's eligibility to receive additional supports. Additional research needs to further understand why standardized methods must be used.

Authentic Assessment

Authentic assessments have been reported as best practice (Bagnato et al., 2014) to use to understand a child's developmental level. Research from studies identifies this type of assessment to inform planning and deliver of instruction (Bagnato et al., 2014; Dennis et al., 2013; Pool & Hampshire, 2019; Turan & Meadan, 2011), however, more evidence is needed to prove this as the most developmentally appropriate practice to be used. A limited number of authentic tools were identified (Dennis et al., 2013; Macy et al., 2016, McAfee et al., 2016; Turan & Meadan, 2011), therefore, an examination of additional tools is needed.

Gaps in Research

Evidence of play-based learning in early childhood classrooms was acknowledged in studies (Baroody & Diamond, 2016; Pyle & Danniels, 2017; Rajapaksha, 2016; Thomas et al., 2011), however, additional research is needed to identify how play impacts all developmental domains. Further studies to support how to create an environment to intentional teach would also be beneficial. Research needs to continue to follow the developmentally appropriate practices of play and authentic assessment to educate professionals in the field of education. Best practices

are not applied in all early childhood classroom, therefore, additional research to support the framework is necessary.

Next Steps

Understanding and implementing developmentally appropriate teaching practices must be the first step in creating high-quality programs. The need for education and professional development is evident (Bagnato et al., 2014; Keilty et al., 2009; Mohamed & Al-Qaryouti, 2016) to educate adults working with young children. Programs need to require teachers to use researched DAP. Identifying DAP allows teachers to become knowledgeable about play and assessment. Next, teachers need to understand how to appropriately use assessments to inform teaching strategies. Effective teachers guide curriculum and decision making from gathered evidence to meet the needs of children (NAEYC, 2009). It is important to use multiple methods of assessment to get a complete picture of a child's development (Dennis et al., 2013). When teachers understand DAP and how to use assessments to drive the curriculum, teachers can be intentional in how to create an environment that supports children to learn through plan. The evidence gained from this paper describes how developmentally appropriate practices, play-based learning, and authentic assessment work together to support children's development.

Conclusion

Play-based learning and authentic assessment are two large components of developmentally appropriate practice that promote children's growth and development in early childhood. This paper summarizes research to answer the question: How can play-based learning with authentic assessment practices support healthy development in preschool classrooms? Through the studies presented, research has identified authentic assessment to have social validity (Bagnato et al., 2014; Turan & Meadan, 2011) as teachers use on-going evidence

(Dennis et al., 2013; Keilty et al., 2009; Kim, 2016; Macy et al., 2016; NAEYC, 2009; Pool & Hampshire, 2019) to progress monitor and plan interventions (Banerjee & Luckner, 2012; Turan & Meadan, 2011; Pool & Hampshire, 2019) to meet the needs of the learner. Research identified teacher's requests for professional development (Banerjee & Luckner, 2012) to understand appropriate tools and practices in assessment (Mohamed & Al-Qaryouti, 2016). Using developmentally appropriate practices supports children's healthy development.

Play is foundation to developing children's lifelong skills. Play benefits children to learn and practice language and communication skills (Baroody & Diamond, 2016; Bollinger & Myers, 2019; Rajapaksha, 2016), cognitive skills, social-emotional skills, and motor skills (Copple & Bredekamp, 2009). Teachers need to understand the influence of guidance, and modeling to influence healthy development. Intentional teaching can be embedded into play to build upon children's previous experiences and guide new knowledge (Thomas et al., 2011). The practice of authentic assessment can naturally be used during play-based learning to support evidence of children's knowledge to lead further instruction. It is essential for educators to create time for children to find joy in learning more about their world as they interact with others (Copple & Bredekamp, 2009). Children are vulnerable and need developmentally appropriate practices to support healthy development. It begins with teachers' choices and play needs to be a priority. "Within play, children are learning the skills that will form a foundation for learning and social interaction in their future lives" (Copple & Bredekamp, 2010, p. 16).

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