ENCYCLOPEDIA
on Early Childhood
Development

Assessment in Play-Based Learning

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Introduction

Over the past two decades, a growing accountability climate in public education contexts has resulted in changes in curriculum and pedagogy at early primary and kindergarten levels. Specifically, we have witness increased academic standards coupled with a greater emphasis on assessment – as both a summative act and as an ongoing formative support for student learning.[1,2] Simultaneously, there have been calls in both research and educational policy to teach academic standards and developmental learning expectations through play.[3-7] Play-based learning involves a variety of activities that enable children to learn in increasingly imaginative and independent ways. Described on a continuum, play-pedagogies range from teacher-directed playful learning (i.e., learning through games) to collaboratively designed play to child-directed free play.[8]

Problem

While research has demonstrated that play can support both social and personal developmental outcomes as well as academic outcomes in kindergarten, for many teachers, the integration of assessment within play-based learning contexts remains a challenge, both conceptually and

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practically.[9-11] Research has shown that teachers struggle to negotiate perceived competing priorities related to accountability mandates, which include increased uses of assessment for monitoring and reporting on student learning in relation to standards-based curriculum expectations, and play-based pedagogical mandates.

Research Context

The vast majority of research in recent years on assessment and learning has examined large-scale, regional assessments and assessment in the upper years.[2,12] Assessment in early years education has historically focused on constructing standardized tests to measure developmental readiness, and only recently has provided an initial conceptual basis for understanding K-2 classroom assessment practices,[13,14] including assessment in play-based pedagogical environments. These conceptual underpinnings argue for the continuous use of assessments throughout the learning process to not only monitor and communicate student achievement but also promote student learning of academic standards as well as social and personal developmental expectations. As play pedagogies begin to occupy a more dominant role within classrooms, as the primary mode of instruction for achieving curriculum expectations, there is an increased need for research on the intersection of assessment within play-based kindergarten education.

Key Research Questions

When looking across the research base on kindergarten classroom assessment, a primary focus has been on understanding the tools and strategies teachers use to assess student learning, and on the teachers' uses of assessment information. However, when we narrow our view to examine strictly assessment within play-based kindergarten contexts, the focus of research changes towards questions of how teachers negotiate play pedagogies alongside traditional direct instruction of academic expectations, and how assessment operates within this negotiated space. Hence the following research questions have been driving research in kindergarten assessment:

a. What tools and strategies do kindergarten teachers use to assess students' developmental and academic learning?
b. How do kindergarten teachers integrate assessment into their classroom planning and use assessment information?

c. How does assessment operate within play-driven pedagogical kindergarten contexts with high academic expectations as well as social and personal developmental expectations?

Recent Research Results

Emerging research is surfacing on classroom assessment practices that can be used to support formative and summative functions within early learning context.[15-18] Summative assessments are those that contribute towards a student's final grade and serve to evaluate student learning at the end of a learning period. Formative assessments, on the other hand, occur during the teaching and learning period, and do not translate into a grade. A general contemporary framework for assessment involves three primary purposes: (a) assessment for learning, which focuses on using assessment throughout the learning process to actively engage students in monitoring their learning towards goals through self-, peer- and teacher-based feedback,[19] (b) assessment as learning, which explicitly addresses metacognitive and self-regulatory development through practiced assessment strategies,[20] and (c) assessment of learning, which involves measuring students learning for grading and reporting. This framework importantly addresses metacognition and self-regulation, both of which are key developmental learning goals for fostering independence in kindergarten and primary level students.[16,18,21] In addition, this framework address both accountability requirements – through a continued emphasis on summative assessments (i.e., assessment of learning) – as well as socio-developmental theories of learning that recognize the role of classroom context, social interactions, and developmental learning continua as foundational to student learning through formative assessment functions (i.e., assessment for learning.)[22]

Specifically, with respect to Kindergarten education, Gullo and Hughes[9] have identified three core principles for assessment. These principles are intended to serve as a practical guide for teachers who aim to balance developmental and academic assessment approaches. The principles include: (a) assessment should be a continuous process within kindergarten classrooms and integrated into teaching and learning periods; (b) assessment should utilize multiple formats including observations of learning, conversations, and testing (among others) to appropriate and adequately assess diverse learners, and (c) assessment should focus on both academic standards and developmental targets.

Few studies have explicitly looked at how these principles of assessment operate directly within play-based learning. In a recent study of 77 teachers, Pyle and DeLuca[23] interviewed and

observed kindergarten teachers to examine their use of assessment during periods of play-based learning. Findings from this study suggest that traditional assessment strategies including direct observation and withdrawal methods of testing in which teachers remove students from play to engage in assessment activities are most common, even during play-based learning periods. While teachers are increasing using video recordings to monitor student learning during periods of play and displaying products of play via documentation walls and portfolios, these practices are not as common. Several digital applications are used to document student learning during play; however, as teachers recognized, the analysis and synthesis of the large amounts of data collected from these applications can be time consuming and required specific assessment literacy skills and knowledge. Finally, teachers in Pyle and DeLuca's[23] study reported that assessment was a fundamental challenge for play-based learning; requiring greater professional development and resources to support this aspect of their practice.

Research Gaps

While research has developed frameworks for assessment in early learning contexts with coupled classroom practices, the recent emphasis on play-based pedagogy calls for additional scholarship in both assessment theory and practice. Specifically, little is known about how assessment operates to support and monitor early learning within contexts of play-based schooling. Considering the role and form of assessment becomes increasing complex when play is considered as a multi-dimensional practice ranging from high levels of teacher support to high levels of student autonomy, future research is needed that attends to the various ways assessment occurs, and for multiple purposes, within diverse contexts of play-based learning.

Conclusions

Assessment is a key feature of classroom teaching and learning within the current accountability framework of public education. At kindergarten and early primary levels, teachers are increasingly required to assess both students' learning of academic standards as well as longstanding social and personal developmental learning targets. In contexts in which play is the dominant pedagogical mandate, integrating assessments to monitor and support student learning is a challenge. At present, teachers tend to rely on traditional modes of assessment – observation and withdrawal from play – in order to determine student learning. To date, research has provided strong frameworks for assessment in early learning context (e.g., assessment for, of, and as learning); however, additional scholarship is need that pairs these frameworks with

play-based pedagogical contexts. Specifically, additional research is needed that looks at how various assessment practices operate within diverse conditions of play-based teaching and learning.

Implications for Parents, Services and Policy

As students are required to engage in increased academic learning through play there is a growing need to measure and support this learning using varied assessment strategies in the classroom. While research on assessment during periods of play-based learning is burgeoning, there is more substantive research on how to use assessment to support learners' development within Kindergarten and early primary contexts. Moving forward, parents and policy makers should be aware of the limitations of existing research in the area of assessment and play in the classroom but optimistic that scholarship is currently addressing this limitation. Perhaps most important for parents and policymakers is to recognize that academic as well as social and personal developmental learning can occur through a variety of pedagogical strategies in the classroom, including play, and that various kinds of play will promote different aspects of children's development. The key now is to meaningfully and seamlessly integrate assessment into play-based learning in ways that augment and support this learning rather than detract from it.

References

1. Feldman EN. Benchmarks curricular planning and assessment framework: Utilizing standards without introducing standardization. *Early Childhood Education Journal*. 2010;38:233-242.
2. Roach AT, Wixson C, Talapatra D. Aligning an early childhood assessment to state kindergarten content standards: Application of a nationally recognized alignment framework. *Educational Measurement: Issues and Practice*. 2010;29(1):25-37.
3. Johnson JE, Christie JF, Wardle F. *Play, development and early education*. New York, NY: Pearson; 2005.
4. Martlew J, Stephen C, Ellis J. Play in the primary school classroom? The experience of teachers supporting children's learning through a new pedagogy. *Early Years*. 2011;31(1):71-83.
5. OECD. *Starting strong: Early childhood education and care – education and skills*. Paris: OECD Publishing; 2001.
6. Pyle A, Bigelow A. Play in kindergarten: An interview and observational study in three Canadian classrooms. Early Childhood Education Journal. 2015;43(5):385-393.
7. Pyle A, Luce-Kapler R. Looking beyond the academic and developmental logics in kindergarten education: The role of Schwab's commonplaces in classroom-based research. *Early Child Development and Care*. 2014;184(12):1960-1977.
8. Pyle A, Danniels E. A continuum of play-based learning: The role of the teacher in play-based pedagogy and the fear of hijacking play. *Early Education and Development*. 2017;28:274-289.
9. Gullo DF, Hughes K. Reclaiming kindergarten: Part I. Questions about theory and practice. *Early Childhood Education Journal*. 2011;38:323-328.

10. Brown C. (2011). Searching for the norm in a system of absolutes: A case study of standards based accountability reform in pre-kindergarten. *Early Education and Development*. 2011;22:151-177.

11. Pyle A, DeLuca C. Assessment in the kindergarten classroom: An empirical study of teachers' assessment approaches. *Early Childhood Education Journal*. 2013;41(5):373-380.

12. Brookhart S. Classroom assessment: Tensions and intersections in theory and practice. *Teachers College Record*. 2004;106:429-458.

13. Dunphy E. (2010). Assessing early learning through formative assessment: Key issues and considerations. *Irish Educational Studies*. 2010;29(1):41-56.

14. Gullo DF. Assessment in kindergarten. In: Gullo DF, ed. *K Today: Teaching and Learning in the Kindergarten year*. Washington, DC: NAEYC; 2006:138-150.

15. Buldu M. Making learning visible in kindergarten classrooms: Pedagogical documentation as a formative assessment technique. *Teaching and Teacher Education*. 2010;26(7):1439-1449.

16. Clark I. Formative assessment: Assessment is for self-regulated learning. *Educational Psychology Review*. 2012;24:205-249.

17. Davies A, LeMehieu P. Assessment for learning: Reconsidering portfolios and research evidence. *Innovation and Change in Professional Education*. 2003;1:141-169.

18. Wiliam D. What is assessment for learning? *Studies in Educational Evaluation*. 2011;37(1):3-14.

19. Assessment Reform Group. *Assessment for learning: 10 principles*. University of Cambridge, UK: Assessment Reform group; 2003.

20. Earl L. *Assessment as learning: Using classroom assessment to maximize student learning*. Thousand Oaks, CA: Corwin Press; 2003.

21. Corter C, Janmohamed Z, Pelletier J, eds. *Toronto First Duty Phase 3 Report*. Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto; 2012.

22. Black P, Wiliam D. Developing a theory of formative assessment. In: Gardner J, ed. *Assessment and learning*. London, UK: Sage; 2006:81-100.

23. Pyle A, DeLuca C. Assessment in play-based kindergarten classrooms: An empirical study of teacher perspectives and practices. *Journal of Educational Research*. 2017;110:457-466.