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WHICH CURRICULUM SHOULD WE USE? HOW DO WE CHOOSE?

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Teachers face conflicting information about choosing a curriculum. Friends may make recommendations — “This one is good.” Organizational history may come into play — “This is the one we’ve used before.” Publishers may promote their own products. Some curricula come with attractive features including materials, activities, and books. So, how should a teacher choose?

We recently completed our study, *Assessing Indiana’s Early Education Classrooms*, in which we asked teachers to identify the curricula they used (Conn-Powers, Cross, & Dixon, 2013). In this brief, we explore the results related to curriculum and offer a set of steps that will guide teachers through the conflicting information to select an effective curriculum.

OTHER BRIEFS IN THIS SERIES...

- *Assessing Indiana’s Early Education Classroom - Final Report*
- *How Children Spend Their Time in Preschool: Implications for Our Practice*
- *Teacher-Child Interactions that Make a Difference*

OUR STUDY

We know that high quality early education represents one of the best investments that society can make for promoting successful educational outcomes for all children and particularly for children who are at risk (Heckman & Masterov, 2007). Early education, if it is done well, can significantly erase or minimize the achievement gaps that exist for many of our children (Barnett, 2011; Camilli, Vargas, Ryan, & Barnett, 2010; Pianta, Barnett, Burchinal, & Thornburg, 2009). The evidence is so overwhelming that 39 states have elected to provide public-funded prekindergarten for their preschoolers (Barnett, Carolan, Fitzgerald, & Squires, 2011). The most recent report published by the National Institute for Early Education Research, *The State of Preschool 2011*, estimates that these states provided prekindergarten services to 28% of all 4 year-olds in this country (Barnett et al., 2011). Unfortunately, Indiana is not one of those states. In the absence of funding and state leadership, Indiana preschoolers have to rely on a patchwork system of services that falls short of the capacity to serve children who need these services most (Indiana Education Roundtable, 2012; Spradlin, Conn-Powers, & Wodicka, 2013).

In 2012, we initiated a study to investigate how early education programs in Indiana were doing.

We were interested in learning how well our classrooms performed in relation to other states, how well our practices aligned with current research evidence documenting effective early education, and how well different programs in our state compared with one another. We sent out invitations to all Head Start programs, licensed child care centers, and public school preschools in the state. We observed and recorded on video 81 classrooms that were geographically and socioeconomically representative: of these classrooms, 28 were in licensed child care centers, 27 were Head Start classrooms, and 26 were public school classrooms. We recorded only in-class, morning activities and analyzed each observation using two tools: the Classroom Assessment Scoring System (CLASS) (Pianta, LaParo, & Hamre, 2008); and the Emerging Academic Snapshot (EAS) (Ritchie, Howes, Kraft-Sayre, & Weiser, 2002).

The CLASS focuses on three broad domains of effective teacher-child interactions that characterize children’s classroom experiences: Emotional Support, Classroom Organization, and Instructional Support. Emotional Support captures how teachers help children develop positive relationships, enjoyment in learning, comfort in the classroom, and appropriate levels of independence. Classroom Organization focuses on how well teachers manage the classroom to maximize learning and keep children engaged.

The Instructional Support domain examines how teachers promote children's thinking and problem solving, use feedback to deepen understanding, and help children develop more complex language skills.

The second tool, the EAS, measures the types and frequency of activities and instruction to which children are exposed. The types of activities recorded include common preschool activities such as free choice time, whole group time, basic routines, small group instruction, individual work time, and meal/snack times. It also measures children's exposure to various curricular areas including aesthetics (art, music, dance), literacy/language, math, science, and social studies. Some teacher actions (instruction) are also included.

CHOOSING AN EFFECTIVE CURRICULUM

Just as our study talks about the patchwork system of services for children that falls short (Spradlin et al., 2013), so are the curricula used in early education often a patchwork of products that fall short in bringing about the learning our Indiana children need for school success. The findings of our study and the research literature on effective curriculum confirm this point.

A curriculum "demonstrates effectiveness if the research has shown that it caused an impact in outcomes" (USDOE, 2013). Not all curricula are effective, and some may even have a negative impact on children's learning.

In this brief we will offer three steps that you can use to determine whether your curriculum is effective. The steps are to:

1. Verify that the curriculum is a written document with specific goals, learning experiences, methods of instruction, and materials for implementation.
2. Use the What Works Clearinghouse (WWC) to learn whether studies of the curriculum meet the guidelines for being evidence-based.
3. Use the WWC to learn if the curriculum has been shown to be effective.

The next section reviews the three steps, which must be used together.

1. *Verify that the curriculum is a written document with specific goals, learning experiences, methods of instruction, and materials for implementation.*

The first thing to do is to make sure that what is chosen is indeed a curriculum. A curriculum is a written document made up of several elements that together guide the teacher's instruction. The National Center on Quality Teaching and Learning (NCQTL, 2012, June) identifies these elements: (a) goals for children's development and learning; (b) experiences through which children will achieve the goals; (c) roles for staff . . . to help children to achieve these goals; and (d) materials needed to support the implementation of a curriculum.

In our study (Conn-Power et al., 2013) we asked teachers to identify the curriculum they used. They provided the names of commercial, comprehensive curricula (ones that cover all content areas) and commercial, content-specific curricula, such as those addressing only phonics or mathematics.

They also mentioned curricula that programs had developed in-house. Figure 1 shows teachers' responses. Research has shown that children have better outcomes when teachers use a curriculum rather than none (Chambers, Cheung, & Slavin, 2006).

In our study, 18 of 80 teachers (22.5%) gave responses that we have identified as "no curriculum." (One teacher did not name a curriculum.) Among this group were 10 teachers who indicated that they did not use a commercial curriculum, as well as five who said that they use the Foundations to the Indiana Academic Standards for Young Children from Birth to Age 5 document as a curriculum. But the Foundations is not a curriculum (Indiana Department of Education and Family and Social Services Administration, 2012).

2. *Use the WWC to learn whether studies of the curriculum meet the guidelines for being evidence-based.*

We searched the WWC for each of the curricula identified by teachers (U.S. Department of Education (USDOE), Institute of Education Sciences, What Works Clearinghouse, 2013). Our review found that 43 of the 80 teachers (53.8%) used curricula that have been studied (Conn-Power et al., 2013). But the other 19 teachers (23.8%) were using curricula that have not been studied to determine their effectiveness, curricula with studies that were not well done, and a curriculum with studies older than the 20-year cut-off point.

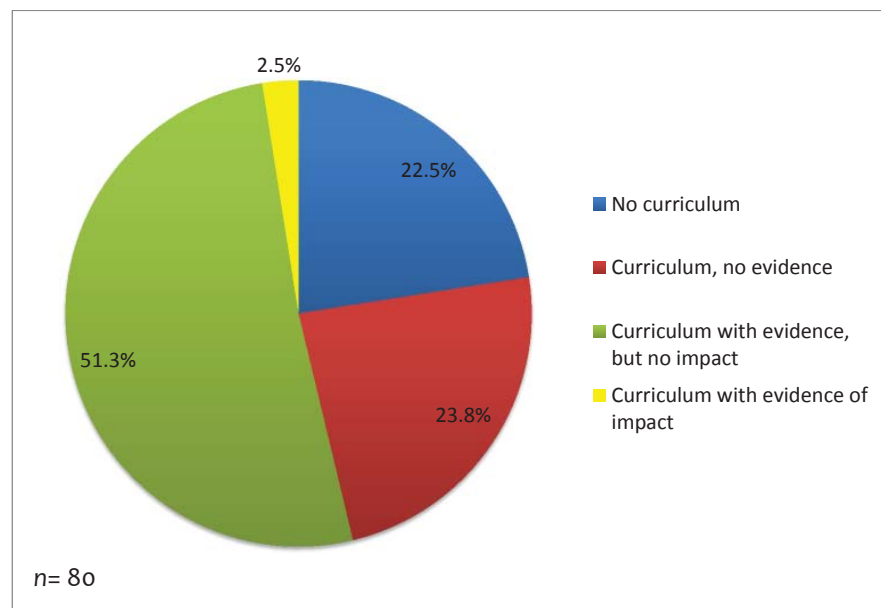


Figure 1. Teachers' use of curricula.

This step is critical to determining the veracity of claims curriculum authors make about their products. (The evidence might show that a curriculum is or is not effective.) A proper review of curriculum can be a complex and time-consuming task that involves searching for studies in peer-reviewed journals. The What Works Clearinghouse, an initiative of the U.S. Department of Education’s Institute of Education Sciences, makes this undertaking easier by reviewing the quality of research on curricula, programs, and practices. The WWC then reports on the evidence of effectiveness so that administrators, teachers, and others can make evidence-based decisions. The WWC is accessed through its website: <http://ies.ed.gov/ncee/wwc/default.aspx>.

3. Use the WWC to learn if the curriculum has been shown to be effective.

Only 2 of the 80 teachers (2.5%) in our study used a curriculum that had evidence of a beneficial effect on children’s outcomes; 41 teachers (51.3%) used curricula that had no beneficial impact on children’s learning (Conn-Power et al., 2013). This troubling finding suggests that the majority of Indiana’s early education teachers are using curricula that are unlikely to bring about beneficial outcomes for children. The findings further suggest that children are not receiving the instruction that produces learning gains. This situation is consistent with national trends. The Advisory Committee on Head Start Research and Evaluation “has serious concerns about whether many curricular materials and teaching methodologies currently used in most Head Start programs are those that are most effective in promoting school readiness outcomes” (U.S. Department of Health and Human Services (HHS), 2012, p. 17).

IMPLICATIONS FOR TEACHERS

The first implication is that teachers will have to engage in decision making about which curriculum to use based on effectiveness in specific outcome areas. Curricula are not effective across all outcome areas.

We searched the WWC using the topic area early childhood education (ECE) to determine which curricula were effective in which areas.

The ECE topic area is focused on school readiness skills in cognition (which includes mathematics), language and literacy, and social-emotional development. (For this brief, we excluded any curriculum that was specific to children with disabilities and English language learners. We also excluded those that were not curricula, but effective programs and practices, such as DaisyQuest or Interactive Shared Book Reading.)

The following table presents *all* of the early childhood curricula with evidence of effectiveness in one or more outcome areas (USDOE, 2013). There were no effective curricula supporting social-emotional development, social studies, aesthetics development, or motor skills.

Table 1

All Curricula Shown by WWC to be Effective in Specific Outcome Areas

| | Mathematics achievement | Print knowledge | Oral language | Phonological processing |
|--|-------------------------|-----------------|---------------|-------------------------|
| Building Blocks for Math (SRA Real Math) | ✓ | | | |
| Pre-K Mathematics | ✓ | | | |
| Doors to Discovery™ | | ✓ | ✓ | |
| HeadSprout® Early Reading | | ✓ | ✓ | |
| Literacy Express | | ✓ | ✓ | ✓ |

The second implication of our study related to curriculum is that teachers will need to make decisions about using a comprehensive curriculum that may not be effective or a content-specific curriculum that is. Head Start guidelines call for choosing a curriculum that is comprehensive (National Center on Quality Teaching and Learning, 2012, June).

A comprehensive curriculum is one that covers multiple outcome areas and can be determined by comparison of the curriculum to the Foundations.

The solution for teachers might be to use both an effective content-specific curriculum with a comprehensive curriculum. The Advisory Committee on Head Start Research and Evaluation cites “a growing research literature [that] suggests that content-specific curricula that are tightly integrated with ongoing assessment and professional development systems are more effective in promoting specific outcomes than a more general curricular framework used alone” (USHHS, 2012, p. 17).

Each program administrator and teacher can use the evidence presented by the WWC to begin reviewing their current curriculum and considering the next steps to add a content-specific or comprehensive curriculum.

These steps will help teachers use the WWC to identify a curriculum that is both effective and a fit for their programs:

1. Gain familiarity with the WWC website at <http://ies.ed.gov/ncee/wwc/default.aspx>.
2. Go to Publications and Reviews to learn about all of the products they have published.

3. Choose early childhood education in the “Select a Topic” box to read about all of the curricula.
4. Learn the terminology to read the intervention reports.
5. Go the News and Events tab to sign up for alerts of new products.

We strongly encourage the use of a curriculum with demonstrated effectiveness and hope that our study findings aid the choice of content-specific curriculum. We found that 44% of children’s time during the day is spent on literacy instruction and activities. Teachers and administrators might decide that because of the amount of time spent on literacy, a language and literacy curriculum would be beneficial for maximizing learning. Teachers and administrators might alternatively choose a mathematics curriculum to boost learning in that area.

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This document was developed and disseminated by the Early Childhood Center (ECC). Its mission is to advance early education practices that welcome, include, and bring about successful school readiness practices for all children.

The Early Childhood Center is one of seven centers located at the Indiana Institute on Disability and Community at Indiana University, Bloomington. The work of the Indiana Institute encompasses the entire life span, from birth through older adulthood.

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