Wise Ways®

**Indicator:** Formative assessments, that are valid and reliable for ages measured, are used to assess all students.

**Explanation:** Pre-K through third grade teachers in the state regularly collect data on students’ progress. Some collect specific data to meet federal and state reporting requirements. Some teachers use informal methods to assess students’ learning and some districts are requiring that all teachers use a standardized formative assessment system. The state education agency does not require districts or schools to use formative assessment system but many districts, schools and teachers are seeking guidance and technical assistance about how to best collect and use data to improve teaching and student learning.

**Question:** How are students currently being assessed? Are the assessments developmentally appropriate? Do teachers have a process of regularly reflecting on the data to inform instruction?

Mrs. Powers is excited to begin the school year teaching first grade. During the first month of school she assesses her 18 first graders to learn about their language and literacy development, knowledge of early numeracy, socio-emotional development, and fine and gross motor development. She also collects informal data. For example, asks her students to draw a self portrait and plans to ask them to draw a picture each month.

Each month after students complete their self portraits, she puts the picture in a portfolio and plans to give the portfolio to families at the end of year conference. She also collects information such as students’ number charts, and examples of student writing to put into the portfolio. She also regularly gives her students worksheets – such as a list of addition problems – to complete.

As Mrs. Powers prepared for the end of year teacher conferences, she reviews each child’s portfolio. She notices that some students have demonstrated dramatic growth over the course of the year but can see that in some months, students were not progressing. She thinks back over the year and remembers that they had to move classrooms because of water damage in the building in January and students didn’t perform as well then. She also sees that few students performed as well on the math worksheets as she had hoped.

Mrs. Powers is excited to share the portfolios with families but after the third meeting, she feels a bit uncomfortable that many family members ask why their children are not performing well in math. She realizes it is because the worksheets that are included in the portfolio are not assessing the topics she covered, are not really age appropriate, and that because she doesn’t like math so much, she hadn’t covered all of the curriculum.

Upon reflection, she thinks that next year she will change approaches but she isn’t sure what the best approach is.

**Research**

Research has demonstrated that early childhood educators’ who engage in the formative assessment process demonstrate improved teaching quality when compared with their peers who do not engage in the process (Snow, 2011; National Research Council, 2008). The term formative assessment refers to this process of collection, analysis, and use of child assessment data to inform instruction and support children’s learning.

Ideally, early childhood educators embed formative assessment in instruction by working directly with children to gather information about what children know and can do, how they process information and solve problems, and how they interact with other children and adults. Formative assessment tools can include informal, but systematic, published assessment instruments, home-grown assessment tools, and observation checklists used by classroom teachers (Riley-Ayers, 2014).

Research and policy currently support regular data collection, analysis and use by early childhood teachers and evidence exists that frequent use of data to tailor instruction is linked with improved outcomes. A summary of policies and research is presented below.

* The National Association for the Education of Young Children (NAEYC) promotes the collection use of developmentally appropriate formative assessments to improve instruction and in recent years the policy has been supported by research evidence (Donovan, Bransford, & Pellegrino, 2000; National Association for the Education of Young Children, 2009).
* The National Council of Teachers of English and The National Council of Teachers of Mathematics have each recently published research briefs describing the benefits of teachers collecting, analyzing and using formative assessment data regularly to inform instruction (National Council of Teachers of English, 2010; National Council of Teachers of Mathematics, 2007).
* Studies report significant increases in student achievement when teachers regularly use data to inform teaching (Black & William, 1998). A study synthesizing evidence from multiple studies conducted by Black and William (1998) found that reported that use of assessment to improve instruction is critical for effective teaching practice.
* When teachers collect and use data over time in students are students demonstrate increases in standardized scores. Thus, when teachers regularly evaluate children, with training and support and using specific tools, the children in these teachers’ classrooms demonstrate a larger growth in reading skills than those reported by the status quo (Meisels, Atkins-Burnett, Xue, Nicholson, Bickel, & Son, 2003).
* Early childhood assessment should be developmentally appropriate and, in order for early childhood teachers to serve a student population that is diverse, teachers need assessment tools that help them to identify children’s strengths and weaknesses in a wide range of learning areas (Chen and McNamee, 2006).
* Children should be assessed within the context of the classroom as they are engaged in meaningful curriculum activities in order to determine children’s curriculum needs (Gullo, 2006). The primary purpose of the assessment should be to inform and improve teacher practice and it should inform teachers as to how well the curriculum is working for individual children. The research literature review points out that traditional paper and pencil assessments of young children are not developmentally appropriate, rather the review highlights several alternative means of assessing children’s learning within the context of the early childhood curriculum. These include curriculum-based assessment, play-based assessment, dynamic assessment, project assessment (observing the child while engaging in actual problem solving activities), and portfolio assessment.

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