SECTION THREE
Evidence-Based Practices Supporting the Use of Educational Data

How to Use This Module:

The professional development training curriculum for *Evidence-Based Practices Supporting the Use of Educational Data* may be used in facilitated group sessions or by individuals in self-directed study. To ensure that the professional development curriculum is properly administered, a ***Facilitator's Guide*** and a ***Facilitator's Checklist*** are provided for group sessions, and a ***Self-Directed Learner's Guide*** and a ***Self-Directed Learner 's Checklist*** are provided for individuals using the professional development curriculum in the self-paced mode.

For both methods, three core teaching tools are used: ***Direct Teach*** content, a ***Checking for Understanding Worksheet***, and an ***Application Worksheet***. These core tools are augmented by a variety of materials listed in ***Section Resources***. We recommend that you review the content in this section and use the professional development method that best meets your district's or school's needs.

3 Direct Teach

Section Objectives:

1. Develop an understanding of how the formative assessment process informs and drives instruction.
2. Develop an understanding of methods that can be used to institutionalize evidence-based practices.
3. Develop an understanding of how educational data can be used effectively to support feedback between students and teachers.
4. Develop an understanding of the process of assessment *for* learning—an approach that enables students to regularly monitor their academic success.

Section Objective 1: Develop an understanding of how the formative assessment process informs and drives instruction.

The Educational Benefits of Formative Assessments

Though formative assessment is not consistently defined in the literature on assessment, formative assessment generally occurs while students are learning new knowledge, and summative assessment occurs at the end of a learning episode (Marzano, 2007, p. 105). Thompson and Wiliam, who recommend a conceptual framework for scaling up school reforms, define formative assessment as "students and teachers using evidence of learning to adapt teaching and learning to meet immediate learning needs, minute-to-minute and day-by-day" (2007, p. 6). Thus, when teachers use formative assessments, teaching becomes adaptive to students' learning needs because formative assessments provide evidence about student learning that is used to adjust instruction to better meet the needs of students. As a result, the use of carefully planned formative assessments can result in student achievement gains (Black and Wiliam, 1998).

Key Strategies for Conducting Formative Assessments

The formative assessment process involves five key strategies (Wiliam, 2007):

- Clarifying learning intentions and sharing criteria for success.

- Engineering effective classroom discussions, questions, and learning tasks that elicit evidence of learning.

- Providing feedback that moves learners forward.

- Activating students as the owners of their own learning.

- Activating students as instructional resources for one another.

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3 Direct Teach

The formative assessment process begins with teachers explaining the learning intentions or targets and the criteria for success. Then teacher prompts, products, and assessments that are closely tied to a standards-based curriculum are used to elicit evidence of learning and identify areas of strength and weakness in students' learning. This evidence provides teachers with valuable information to adjust instruction, provide feedback that moves learners forward, and engages students in the learning process. The formative assessment process can be viewed as a continuum of opportunities for teachers—from opportunities to make microadjustments to midlesson teaching to opportunities to make macroadjustments to both curriculum and instruction. Tom Guskey (2007, p. 16), author and former director of the Center for the Improvement in Teaching and Learning, believes for assessments to become an integral part of the instruction process, teachers need to:

- Use assessments as sources of information for both students and teachers.

- Follow assessments with high-quality corrective instruction.

- Give students second chances to demonstrate success.

Many teachers possess the ability to sense whether or not their students are "getting it." Their formative assessment questions reveal what students have learned, their level of comprehension, and their abilities to use and apply new knowledge. Students' answers help teachers make decisions about the pace of instruction, when to review, when to provide more practice, or when to move ahead.

However, the use of formative assessment data also helps teachers to be more analytical about what standards their students have mastered and those standards that need remediation. In addition to using carefully structured questioning strategies, recent technologies provide teachers with numerous resources to easily and quickly formatively assess students. For example, "clickers"—a device that allows students to select or "click" a predetermined static response such as A, B, or C—provide teachers with instant feedback on midlesson questioning by immediately analyzing students' answers and converting their answers into graphs. The use of clickers informs teaching by giving teachers feedback on students' understanding and providing specific information for teachers to make midlesson adjustments to instruction. Using the clickers makes it possible to formatively assess all students, even students who normally remain silent when asked to answer questions for fear of embarrassment (Sindelar, 2010).

In addition to using formative assessments during instruction, formative assessment data can be used to inform instruction that has taken place over multiple lessons. With formative assessment data, teachers know whether or not students understand learning targets and

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standards, concepts, and processes that were taught in multiple lessons. In this case, a formative assessment may take the form of a quiz or chapter assessment to determine what students have or have not learned over a period of several lessons. Looking at data from formative classroom assessments serves as a meaningful source of information because it provides teachers with specific guidance to improve the quality of teaching by helping teachers identify what was taught well and what needs work (Guskey, 2007).

Section Objective 2: Develop an understanding of methods that can be used to institutionalize evidence-based practices.

While evidence-based practices, such as formative assessments and the role of feedback, provide valuable information to inform instruction, give feedback that moves learners forward and engages students in the learning process, use of these evidence-based practices requires additional factors to be in place to institutionalize the data analysis process.

- **Organizational factors.** Structures and resources to nurture common curriculum and assessments and time allotted for Professional Learning Communities (PLCs) and data team meetings need to be in place.
  - District and school leaders should place an emphasis on the analysis of data to inform instruction through policy and communications.
  - School leaders are encouraged to discuss the use of educational data in the classroom during pre- and postobservation conferences.
  - In PLCs, teachers should discuss how to use available assessment data effectively.
  - Teachers should initiate discussions with school and district leaders for professional development that targets the use of assessments aligned to standards to inform their instruction.

- **Technical factors.** A provision must also be made for making data analysis reports available in a timely and efficient manner.
  - Both district and school leaders should take ownership of data solution (for example, Student Information System [SIS] and Learning Management System [LMS]), selection, and implementation efforts.
  - District and school leaders should eliminate barriers for teachers to use the breadth of technology tools that enable them to collect, view, and analyze educational data.
  - Teachers should aim to use all available educational data in the classroom and aggressively leverage technology tools and techniques to achieve desired educational outcomes.

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Implementation and Selection Approaches Toward SIS/LMS Solutions offers recommendations for selecting and implementing technology solutions that enable the use of assessment and other student data (Gartner, Inc., 2011, p. 16).

Section Objective 3: Develop an understanding of how educational data can be used effectively to support feedback between students and teachers.

Data from formative assessments not only inform teachers, they also can inform students and engage them in the educational process by providing meaningful feedback. Author and researcher John Hattie's meta-analysis on student learning determined that feedback is "the most powerful single modification" that enhances student achievement and that the "simplest prescription for improving education is 'dollops of feedback'" (Hattie, 1992, p. 9). However, for feedback to be effective, students must understand:

- Their learning target or the desired goal.

- Their current position in relation to achieving the learning target or desired goal.

- How to close the gap between their current position and their learning target or the desired goal.

To achieve these three elements of effective feedback, teachers need to explain the learning targets and the criteria for success when they initiate instruction. Then the feedback provided by formative assessments should provide students with an understanding of their position in relation to achieving their learning target or desired goal. The corrective instruction should help students understand their next steps for improvement in order to successfully reach learning targets, standards, and desired goals.

Effective feedback can come in the form of teacher-student conferences, class discussions, homework, or formative classroom assessments. Black and Wiliam's article "Inside the Black Box" (1998) reflects that "opportunities for pupils to express their understanding should be designed into any piece of teaching, for this will initiate the interaction through which formative assessment aids learning." Thus, individual student conferences or class discussions should create opportunities for students to display their understanding of learning targets. Similarly, homework and classroom assessments should contain questions and performances that are relevant to learning targets in order to give students an understanding of where they are in the learning process.

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Feedback provided by formative assessments along with corrective instruction helps students identify next steps for their academic improvement and make progress toward successfully reaching learning targets and standards. When formative assessments and the corrective feedback are aligned to learning targets and standards, students are better able to see a pathway to their own personal academic success and feel there's a reason to try. When corrective feedback provides students with next steps for their academic improvement, they begin to think, "I can do this," and are more motivated to take ownership of their learning. Thus the formative assessment process becomes a motivational tool when it identifies errors in learning and is "followed by high-quality corrective instruction designed to help students remedy whatever learning errors (were) identified (by) the assessment" (Guskey, 2007, p. 21).

Students become partners in the assessment process when teachers provide them with feedback that includes standards-based item analyses of their work. Individual data results of either multiple-choice tests or rubric-graded projects and performances allow students to target the concepts and problems that they need to relearn after initial instruction. Individual item analysis reports for multiple-choice tests outline the questions missed and the specific standards or learning targets that students need to understand. Rubrics, too, help students become more analytical about self-assessment and more productive in seeing next steps. Rubrics provide specific criteria for success before students begin a project and show them where they have fallen short of the learning target when the project is complete. When students compare their work to criteria on a rubric, they learn what elements of their work meet expectations and where they need to learn more to improve their work. Students understand this feedback more readily because it relates directly to their learning and enables them to demonstrate their learning in relation to a particular product.

Section Objective 4: Develop an understanding of the process of assessment *for* learning—an approach that enables students to regularly monitor their academic success.

Assessment *for* learning is a phrase developed by Richard Stiggins, founder and executive director of the ETS Assessment Training Institute, as a remedy to reform efforts that were highly focused on high-stakes testing such as federal or state yearly summative assessments. In writing about assessment, Stiggins makes the distinction between assessments *of* learning, which dominate educational practice by providing evidence of achievement for public reporting, and assessments *for* learning, which serve to help students learn more and take ownership of their learning. Assessment *for* learning promotes the notion that when done properly, teachers and students use the assessment *for* learning process to promote a continuous flow of information about student achievement to advance, rather than merely report, student progress.

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3 Direct Teach

According to Stiggins (2002), the basic principles of assessment for learning are the following:

- Teachers should understand and articulate in advance of teaching the achievement targets that their students are to hit.

- Teachers should inform their students about those learning goals in terms that students understand from the very beginning of the teaching and learning process.

- Teachers should be assessment-literate and thus are able to transform those expectations into assessment exercises and scoring procedures that accurately reflect student achievement.

- Teachers should use classroom assessment to build students' confidence in themselves as learners, helping them take responsibility for their own learning and thus lay a foundation for lifelong learning.

- Classroom assessment results should be consistently translated into informative (not merely judgmental) feedback for students, providing them with specific insights on how to improve.

- Students should work closely with their teachers to review assessment results so that they remain in touch with, and thus feel in charge of, their own improvement over time.

- Teachers should continuously adjust instruction based on the results of classroom assessments.

- Students should be actively involved in communicating with their teachers and their families about their achievement status and improvement.

The benefits of teachers using assessments *for* learning include students' gaining confidence in themselves as learners and, as noted earlier, taking responsibility for their own learning because students become more confident that they will continue to learn at productive levels and they keep trying to learn. As Briana Willis, the student in the *Henry County Schools Video Exemplar*, remarks, "I love having the information to help me keep tabs on myself.... I want to achieve my goals to the fullest." With guidance and data, assessments for learning help students to clarify how they can improve their work on a timely basis. Consequently, assessments move from being simply an evaluation tool for assigning a grade to a practical, student-friendly tool for self-assessment, corrective feedback, and goal setting. Teachers, parents, as well as students benefit from students' new sense of motivation, their higher levels of achievement, and their sense of responsibility for learning.

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3 Direct Teach

The following are recommendations (Hamilton et al., 2009, p. 20-23) for teaching students to examine data from their assessments for learning and for setting learning goals for academic success:

- **Teachers should explain expectations and assessment criteria.** To interpret their own achievement data, students need to understand how their performance fits within the context of classroom-level or school-wide expectations. Teachers should clearly articulate the content knowledge or skills that they expect students to achieve throughout the school year, conveying goals for individual lessons and assignments, as well as goals for the unit and end-of-year performance. Teachers should explicitly describe the criteria that will be used to assess performance toward these goals.

- **Teachers should provide feedback to students that is timely, specific, and constructive.** Feedback should be designed to help students understand their own strengths and weaknesses, explaining why they received the grades and scores they did and identifying the specific content areas students should focus on to improve.

- **Teachers should provide time and data analysis tools that help students learn from feedback.** When providing feedback, teachers should set aside 10 to 15 minutes of classroom instructional time to allow students to interpret and learn from the data. It is important to undertake this reflection during class time, when the teacher can help students interpret feedback and strategize ways to improve their performance. During this time, teachers should have students individually review written feedback and ask questions about that feedback.

- **Teachers should use students' data analyses to guide instructional changes.** Although data analysis tools help students learn from teacher feedback, they also provide valuable information that teachers can use to inform their instruction. Teachers should collect and review students' goals and analyses to identify content areas and skills that need to be reinforced and factors that may motivate student learning.

Many districts are leveraging technological tools and solutions to assist teachers, students, and parents in their access to and use of educational data. SIS and LMS solutions allow for the monitoring of specified standards and analysis of student data to determine where there is a need for improvement to meet learning standards. As districts, schools, and teachers in classrooms continue to realize the value of using educational data effectively, the features of SIS and LMS solutions will continue to grow and provide the results of evidence-based practices (for example, the formative assessment process and the role of feedback) to stakeholders. Additional features being provided by many SIS and LMS solutions include automating the process for development of rubrics, student learning portfolios, and individual learning plans.

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Closing the Gap Templates
Goals Workshop

Instructional Data Collection and Use Plan

District Case Study
Henry County Schools Case Study

District Video
Henry County Schools Video Exemplar

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Direct Teach Reflection: When educators focus on supporting evidence-based practices, they need to decide what types of evidence are helpful to teachers and students. Data from formative classroom assessments serves as a meaningful source of information because it provides teachers with specific guidance to improve the quality of teaching by helping them identify what was learned and which learning standards need more attention. This same data also helps students understand the next steps they need to take to engage in the continuous process of improvement.

After reading and reflecting on the *Direct Teach* content, apply what you have learned in the following *Checking for Understanding Worksheet* exercises.

1. Explain how the formative assessment process informs and drives instruction.

2. Explain why it is helpful to administrators, teachers, students, and parents to have standards-based formative assessment educational data.

3. Describe two methods for institutionalizing evidence-based practices.

4. Explain why feedback to students needs to be timely, specific, and constructive.

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3 Application Worksheet

Direct Teach Reflection: When educators focus on supporting evidence-based practices, they need to decide what types of evidence are helpful to teachers and students. Data from formative classroom assessments serves as a meaningful source of information because it provides teachers with specific guidance to improve the quality of teaching by helping them identify what was learned and which learning standards need more attention. This same data also helps students understand the next steps they need to take to engage in the continuous process of improvement.

After reading and reflecting on the *Direct Teach* content and completing the *Checking for Understanding Worksheet*, apply what you have learned in the following *Application Worksheet* exercises.

1. List the types of formative assessment data *teachers* in your school or district currently use to inform and drive instruction.

2. List two "next steps" to help *teachers* in your school or district use data from formative assessments to inform and drive instruction.

3. List the sources of data (formative, benchmark, summative) that currently are in place in your district or schools to help *students* "understand where they are in the instructional process."

4. List two "next steps" to help *students* use data from assessments *for* learning to "understand where they are in the instructional process."

3 Facilitator's Guide

✓ Meeting Objectives

1. Develop an understanding of how the formative assessment process informs and drives instruction.
2. Develop an understanding of methods that can be used to institutionalize evidence-based practices.
3. Develop an understanding of how educational data can be used effectively to support feedback between students and teachers.
4. Develop an understanding of the process of assessment *for* learning—an approach that enables students to regularly monitor their academic success.

Meeting Preparation

The professional development process for turning educational data into action should be led at every level by a team that pairs an instructional leader with a district- or school-level information technology (IT) leader. These chosen facilitators will participate in the identification of other district, school, and classroom leaders, who will form the Professional Development Facilitation Team. This cadre of professional development facilitators will be responsible for leading professional development at the district, school, and classroom levels. These leaders should consider the vision and goals that the district and schools have for building a data-rich culture prior to administering the professional development curriculum.

To help the participants to prepare for the meeting, the facilitators should ask them to complete the following assignments before attending the meeting:

- Read the *Direct Teach* content for Section Three.

- Complete the *Checking for Understanding Worksheet*.

- Read the *Henry County Schools Case Study*.

Meeting One: Develop an understanding of how the formative assessment process informs and drives instruction.

(Approximate meeting time: 2 hours.)

1. At the beginning of the meeting, review the *Direct Teach* content and ask participants to share their answers to the questions on their *Checking for Understanding Worksheet*. Facilitate a discussion about the importance of using standards-based formative assessment data to inform instruction.

2. Next ask participants to watch the *Henry County Schools Video Exemplar*. Identify and discuss how teachers in that district are using educational data to inform their instruction.

3. Then ask participants to review the *Instructional Data Collection and Use Plan*, giving attention to Table 1, Data Collection and Use Plan Template (page 8). Using Slides 8, 9, and 10 in the *Goals Workshop* template, ask participants to draft goals and identify types of resources and reports needed for teachers to have timely, standards-based data from formative classroom assessments.

Meeting Two: Develop an understanding of methods that can be used to institutionalize evidence-based practices.

(Approximate meeting time: 2 hours.)

1. At the beginning of the meeting, have participants view the *Henry County Schools Video Exemplar* again. Identify and discuss how the student in the video is using her data. Emphasize the importance of the educational data being standards-based and timely.

2. Ask participants to review Slides 8, 9 and 10 in the *Goals Workshop* template and discuss the data required to address the challenge that will be most helpful in providing feedback to students.

3. Then ask participants to identify when, where, and how they will use the types of data required to address the challenge reports identified on Slide 8 of the *Goals Workshop* template. Emphasize the importance of using class data in PLC and data team meetings as well as the importance of providing students with class time and guidance when using individualized student data reports.

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Meeting Three: Develop an understanding of how educational data can be used effectively to support feedback between students and teachers.

(Approximate meeting time: 2 hours.)

1. At the beginning of the meeting ask participants to review and discuss the *Henry County Schools Case Study*, giving special emphasis to the statement:

   Lifelong learning is a fundamental goal of the Henry County Schools. As such, engendering student ownership of their own education is considered a key, and giving students—as well as teachers—timely information is a strategy that empowers students to understand where they are in the instructional process and what they may need to work on to either continue their progress or to improve their performance. Students immersed in such an environment are seen as more likely to graduate with habits of a lifelong learner—a person who seeks to understand what they need to know sets about gaining the desired knowledge, skills, and abilities.

2. Review John Hattie's quote that feedback is "the most powerful single modification" that enhances student achievement and that the "simplest prescription for improving education is 'dollops of feedback'" (Hattie, 1992, p. 9). Next, discuss with the participants the three things that students must understand in order for feedback to be effective. Ask participants to reflect on how they are currently using these practices with students or plan to in the future.

3. Lead the participants through a review of the interactive product comparison tools for SIS and LMS that are provided on the *Closing the Gap* website under the "SIS/LMS Solutions" tab. These comparison tools allow district, school, and technology leaders to:

   • View an overview of each vendor and product.

   • View more detailed functional capabilities of each vendor product.

   • Select up to three products to compare side by side.

4. Ask participants break out into smaller work groups. Then assign each team different SIS and LMS vendor products to review.

5. Instruct each team to the use the "Compare Products" function for their assigned vendors and look at the product capabilities listed for assessments and reporting.

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6. Next, ask participants to use this information to brainstorm about what types of assessments and reporting features they would need within their own district, school, or classroom to use data more effectively.

7. Since the product comparison tool is an interactive feature on the *Closing the Gap* website, this exercise can be conducted with participants using computers in real time to review the information. If computer access is not available at the training site, copy screen shots of the information and provide them as handouts for the participants to review.

Meeting Four: Develop an understanding of the process of assessment *for* learning—an approach that enables students to regularly monitor their academic success.

(Approximate meeting time: 2 hours.)

1. Review Richard Stiggins' basic principles of assessment *for* learning and discuss with participants how these principles support the continuous flow of information in support of students being academically successful. Ask participants to reflect on the basic principles and how they may apply to educators' work at the district or school level.

2. Ask participants to review the *Henry County Schools Case Study* with special emphasis on student Briana Willis' statement, "I love having the information to help me keep tabs on myself...." Ask participants how assessments move from being simply an evaluation tool for assigning a grade to a practical, student-friendly tool for self-assessment, corrective feedback, and goal setting.

3. Review the four recommendations for teaching students to examine their own data in order to set goals for their academic success. Ask participants to provide or reflect upon examples of how they are currently using these recommendations or their plans to do so in the future.

4. Ask participants to reflect on their "next steps" to help *students* use data from assessments *for* learning to "understand where they are in the instructional process" (Question 4 of the *Application Worksheet*).

At the conclusion of the meetings, encourage participants to take leadership roles at their respective school or classroom level. Organize meetings to advance the objectives and monitor progress in supporting evidence-based practices.

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Q A Recommended Answers to Questions Presented in the *Checking for Understanding Worksheet*

QUESTION 1:

Explain how the formative assessment process informs and drives instruction.

ANSWER:

When teachers use formative assessments, teaching becomes adaptive to students' learning needs because formative assessments provide evidence about student learning that can be used to adjust instruction to better meet the needs of students. For the formative assessment process to be successful, teachers need to be certain they clarify learning intentions and the criteria for success, lead classroom discussions and learning tasks that elicit evidence of learning, and provide feedback that moves learners forward and engages students in their own learning.

QUESTION 2:

Explain why it is helpful to administrators, teachers, students, and parents to have standards-based formative assessment data.

ANSWER:

In order for teachers and students to understand where students are in the process of continuous improvement, it is valuable for assessments to be standards-based. With standards-based assessments, teachers and students are able to gather meaningful data about which standards students know and which standards they don't know.

QUESTION 3:

Describe two methods for institutionalizing evidence-based practices.

ANSWER:

To institutionalize evidence-based practices, structures and resources need to be put in place to nurture common standards-based curriculum and assessments. This includes organizational factors such as time allotted for PLC and data team meetings as well as technical factors such as the provision for data analysis reports to students, teachers, and administrators in a timely and efficient manner.

QUESTION 4:

Explain why feedback to students needs to be timely, specific, and constructive.

ANSWER:

Teachers need to provide specific and constructive feedback to students in a timely manner so that students are able to understand their own strengths and weaknesses, and get started on the continuous process of improvement. As Briana Willis, the student in the *Henry County Schools Video Exemplar*, remarks, "I love having the information to help me keep tabs on myself…. I want to achieve my goals to the fullest." If feedback to Briana is not timely, specific, and constructive, she will not be as motivated to meet her goals because she will not know the specific next steps she needs to take to meet them.

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3 Facilitator's Checklist

Tasks	Target Date for Completion	Status (Not Started, In Progress, Completed)	Person Responsible/Notes
WORKSHOP PREPARATION			
1. Workshop facilitators have been selected: one IT leader and one instructional leader.			
2. Professional development participants have been selected to train administrators and teachers in evidence-based practices.			
3. Professional development participants have read the *Direct Teach* content and the *Henry County Schools Case Study*.			
4. Professional development participants have completed the *Checking for Understanding Worksheet*.			
WORKSHOP EXECUTION			
1. Professional development participants have read and discussed the *Direct Teach* content and the *Henry County Schools Case Study*. They have also viewed the *Henry County Schools Video Exemplar* and then discussed how teachers are using educational data to inform their instruction.			
2. Professional development participants have completed the *Checking for Understanding Worksheet* and have discussed the value of using standards-based formative assessment data to inform instruction.			

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3 Facilitator's Checklist

Tasks	Target Date for Completion	Status (Not Started, In Progress, Completed)	Person Responsible/Notes
WORKSHOP EXECUTION, *continued*			
3. Professional development participants have reviewed the *Instructional Data Collection and Use Plan*, giving attention to Table 1, Data Collection and Use Plan Template, on page 8.			
4. Participants have viewed the *Henry County Schools Video Exemplar* and discussed how the student in the video is using her data.			
5. Participants have reviewed Slides 8, 9, and 10 in the *Goals Workshop* template and discussed the data required to address the challenge that will be most helpful in providing feedback to students.			
6. Participants have identified when, where, and how they will use the types of data required to address the challenge reports identified on Slide 8 of the *Goals Workshop* template. They understand the importance of using classroom data in PLC and data team meetings as well as the importance of providing students with class time and guidance when using individualized student data reports.			

Tasks	Target Date for Completion	Status (Not Started, In Progress, Completed)	Person Responsible/Notes
WORKSHOP EXECUTION, *continued*			
7. Using Slides 8, 9, and 10 in the *Goals Workshop* template professional development participants have drafted goals and identified types of resources and reports needed for teachers to have timely, standards-based data from formative classroom assessments.			
8. Professional development participants have identified when and how they will use the types of data required to address the challenge reports identified on Slide 8 of the *Goals Workshop* template.			
9. Participants have reviewed and discussed the *Henry County Schools Case Study*, giving special emphasis to the statement about lifelong learning.			
10. Participants have reviewed John Hattie's quote about feedback and have discussed the three things that students must understand in order for feedback to be effective.			
11. Using the *Application Worksheet,* participants have listed the resources that currently are in place in their school or district to help students "understand where they are in the instructional process."			

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Tasks	Target Date for Completion	Status (Not Started, In Progress, Completed)	Person Responsible/Notes
WORKSHOP EXECUTION, *continued*			
12. Participants have completed interactive product comparison tools exercise for SIS and LMS that are provided on the *Closing the Gap* website under the "SIS/LMS Solutions" tab. They have brainstormed about what types of assessments and reporting features they would need within their own district, school, or classroom to use data more effectively.			
13. Professional development participants have reviewed Richard Stiggins' basic principles of assessment *for* learning and have discussed how these principles support the continuous flow of information in support of students' being academically successful.			
14. Professional development participants have reviewed the *Henry County Schools Case Study* and reflected upon the student's statement, "I love having the information to help me keep tabs on myself…." They have discussed how assessments move from being simply an evaluation tool for assigning a grade to a practical, student-friendly tool for self-assessment, corrective feedback, and goal setting.			
15. Professional development participants have reviewed the four recommendations for teaching students to examine their own data in order to set goals for their academic success. They have reflected on examples of how they are currently using these recommendations or their plans for the future.			
16. Professional development participants have reflected on their "next steps" to help *students* use data from assessments *for* learning to "understand where they are in the instructional process" (Question 4 of the *Application Worksheet*).			

SD3

Self-Directed Learning Materials

Enclosed are a *Self-Directed Learner's Guide* and a *Self-Directed Learner's Checklist*. These supplemental tools provide customized instructions for individuals choosing to use the *Toolkit* in self-directed study. The materials are designed to be used in conjunction with the *Direct Teach* content, *Checking for Understanding Worksheet*, and *Application Worksheet* included in this section.

3 Self-Directed Learner's Guide

✓ Learning Objectives:

1. Develop an understanding of how the formative assessment process informs and drives instruction.
2. Develop an understanding of methods that can be used to institutionalize evidence-based practices.
3. Develop an understanding of how educational data can be used effectively to support feedback between students and teachers.
4. Develop an understanding of the process of assessment *for* learning—an approach that enables students to regularly monitor their academic success.

Step One: Develop an understanding of how the formative assessment process informs and drives instruction.

1. Read *Direct Teach* content for Section Three and complete the *Checking for Understanding Worksheet*. Then read the *Henry County Schools Case Study*.

2. Review your responses to the questions on the *Checking for Understanding Worksheet* and reflect on the value of using standards-based formative assessment data to inform instruction.

3. Watch the *Henry County Schools Video Exemplar* and identify ways in which teachers in that district are using data to inform their instruction.

4. Then review the *Instructional Data Collection and Use Plan*, giving attention to Table 1, Data Collection and Use Plan Template (page 8). Using Slides 8, 9, and 10 in the *Goals Workshop* template, draft goals and identify types of resources and reports needed for teachers to have timely, standards-based data from formative classroom assessments.

Step Two: Develop an understanding of methods that can be used to institutionalize evidence-based practices.

1. View the *Henry County Schools Video Exemplar* again. Identify and discuss how the student in the video is using her data to have access to feedback. Consider the importance of the educational data being standards-based and timely.

2. Review Slides 8, 9, and 10 in the *Goals Workshop* template and reflect on the data required to address the challenge that will be most helpful in providing feedback to students.

3. Then identify when, where, and how you will use the types of data required to address the challenge reports identified on Slide 8 of the *Goals Workshop* template. Consider the importance of using class data in PLC and data team meetings as well as the importance of providing students with class time and guidance when using individualized student data reports.

Step Three: Develop an understanding of how educational data can be used effectively to support feedback between students and teachers.

1. Review the *Henry County Schools Case Study* and give specific consideration to the statement:

   Lifelong learning is a fundamental goal of the Henry County Schools. As such, engendering student ownership of their own education is considered a key, and giving students—as well as teachers—timely information is a strategy that empowers students to understand where they are in the instructional process and what they may need to work on to either continue their progress or to improve their performance. Students immersed in such an environment are seen as more likely to graduate with habits of a lifelong learner—a person who seeks to understand what they need to know sets about gaining the desired knowledge, skills, and abilities.

2. Review John Hattie's quote that feedback is "the most powerful single modification" that enhances student achievement and that the "simplest prescription for improving education is 'dollops of feedback'" (Hattie, 1992, p. 9). Consider the three things that students must understand in order for feedback to be effective. Reflect on how you are currently using these practices with students or plan to in the future.

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3. Next, review the interactive product comparison tools for SIS and LMS that are provided on the *Closing the Gap* website under the "SIS/LMS Solutions" tab. These comparison tools allow district, school, and technology leaders to:

  • View an overview of each vendor and product.

  • View more detailed functional capabilities of each vendor product.

  • Select up to three products to compare side by side.

4. Use the "Compare Products" function for an SIS and an LMS vendor of your choosing and look at the product capabilities listed for assessments and reporting. Consider what types of assessments and reporting features you would need in your district, school, or classroom to use data more effectively. Since the product comparison tool is an interactive feature on the *Closing the Gap* website, you can complete this exercise using a computer in real time to review the information.

Step Four: Develop an understanding of the process of assessment *for* learning—an approach that enables students to regularly monitor their academic success.

1. Review Richard Stiggins' basic principles of assessment for learning and consider how these principles support the continuous flow of information in support of students' being academically successful. Reflect on the basic principles and how they may apply to your work at the district or school level.

2. Review the *Henry County Schools Case Study* with special emphasis on student Briana Willis' statement, "I love having the information to help me keep tabs on myself…." Consider how assessments can move from being simply an evaluation tool for assigning a grade to a practical, student-friendly tool for self-assessment, corrective feedback, and goal setting.

3. Review the four recommendations for teaching students to examine their own data in order to set goals for their academic success. Reflect upon examples of how you are currently using these recommendations or your plans to do so in the future.

4. Reflect on your "next steps" to help *students* use data from assessments *for* learning to "understand where they are in the instructional process" (Question 4 of the *Application Worksheet*).

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Q&A Recommended Answers to Questions Presented in the *Checking for Understanding Worksheet*

QUESTION 1:

Explain how the formative assessment process informs and drives instruction.

ANSWER:

When teachers use formative assessments, teaching becomes adaptive to students' learning needs because formative assessments provide evidence about student learning that can be used to adjust instruction to better meet the needs of students. For the formative assessment process to be successful, teachers need to be certain they clarify learning intentions and the criteria for success, lead classroom discussions and learning tasks that elicit evidence of learning, and provide feedback that moves learners forward and engages students in their own learning.

QUESTION 2:

Explain why it is helpful to administrators, teachers, students, and parents to have standards-based formative assessment data.

ANSWER:

In order for teachers and students to understand where students are in the process of continuous improvement, assessments need to be standards-based. With standards-based assessments, teachers and students are able to gather meaningful data about which standards students know and which standards they don't know.

QUESTION 3:

Describe two methods for institutionalizing evidence-based practices.

ANSWER:

To institutionalize evidence-based practices, structures and resources need to be put in place to nurture common standards-based curriculum and assessments. This includes organizational factors such as time allotted for PLC and data team meetings as well as technical factors such as the provision for data analysis reports to students, teachers, and administrators in a timely and efficient manner.

QUESTION 4:

Explain why feedback to students needs to be timely, specific, and constructive.

ANSWER:

Teachers need to provide specific and constructive feedback to students in a timely manner so that students are able to understand their own strengths and weaknesses and get started on the continuous process of improvement. As Briana Willis, the student in the *Henry County Schools Video Exemplar*, remarks, "I love having the information to help me keep tabs on myself.... I want to achieve my goals to the fullest." If feedback to Briana is not timely, specific, and constructive, she will not be as motivated to meet her goals because she will not know the specific next steps she needs to take to meet them.

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3 Self-Directed Learner's Checklist

Tasks	Target Date for Completion	Status (Not Started, In Progress, Completed)	Notes
1. I have read the *Direct Teach* content and the *Henry County Schools Case Study,* and have viewed the *Henry County Schools Video Exemplar*.			
2. I have completed the *Checking for Understanding Worksheet* and understand the value of using standards-based formative assessment data to inform instruction.			
3. I have watched the *Henry County Schools Video Exemplar* and identified ways in which teachers in that district are using data to inform their instruction.			
4. I have reviewed the *Instructional Data Collection and Use Plan*, giving attention to Table 1, Data Collection and Use Plan Template (page 8). Using Slides 8, 9, and 10 in the *Goals Workshop* template, I have drafted goals and identified types of resources and reports needed for teachers to have timely, standards-based data from formative classroom assessments.			
5. I have viewed the *Henry County Schools Video Exemplar* again and identified how the student in the video is using her data to have access to feedback.			

Tasks	Target Date for Completion	Status (Not Started, In Progress, Completed)	Notes
6. I have reviewed Slides 8, 9, and 10 in the *Goals Workshop* template and have reflected on the data required to address the challenge that will be most helpful in providing feedback to students.			
7. I have identified when, where, and how I will use the types of data required to address the challenge reports identified on Slide 8 of the *Goals Workshop* template. I have considered the importance of using class data in PLC and data team meetings as well as the importance of providing students with class time and guidance when using individualized student data reports.			
8. I have reviewed the *Henry County Schools Case Study* and give specific consideration to the statement about lifelong learning.			
9. I have reviewed John Hattie's quote that feedback is "the most powerful single modification" that enhances student achievement and that the "simplest prescription for improving education is 'dollops of feedback'" (Hattie, 1992, p. 9). I have considered the three things that students must understand in order for feedback to be effective.			
10. I have reviewed the interactive product comparison tools for SIS and LMS. I have looked at the product capabilities listed for assessments and reporting. I have considered the types of assessments and reporting features I would need in my district, school, or classroom to use data more effectively.			

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Tasks	Target Date for Completion	Status (Not Started, In Progress, Completed)	Notes
11. I have reviewed Richard Stiggins' basic principles of assessment *for* learning and have considered how these principles support the continuous flow of information in support of students' being academically successful. I have reflected on the basic principles and how they may apply to my work at the district or school level.			
12. I have reviewed the *Henry County Schools Case Study* with special emphasis on student Briana Willis' statement, "I love having the information to help me keep tabs on myself...." I have considered how assessments can move from being simply an evaluation tool for assigning a grade to a practical, student-friendly tool for self-assessment, corrective feedback, and goal setting.			
13. I have reviewed the four recommendations for teaching students to examine their own data in order to set goals for their academic success. I have reflected upon examples of how I am currently using these recommendations or my plans to do so in the future.			
14. I have reflected on my "next steps" to help *students* use data from assessments *for* learning to "understand where they are in the instructional process" (Question 4 of the *Application Worksheet*).			

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