**Script Module 4 – Identifying Learning Targets for the Common Assessment**

[Slide 3] - In the previous modules, we talked about various purposes for common assessments and that assessments with different purposes will be built differently. One of the most important reasons to address this early is to work toward assessment validity, we want our assessment to yield accurate information.

[Slide 4] - If you are familiar with the organizing structure Rick Stiggins and colleagues from the Assessment Training Institute use, an assessment that yields accurate information is one that …

* has a clear purpose – in other words we know why we are giving the assessment, and who will use the data and how it will be used
* has clear targets – we know what we want students to know, be able to do, think and believe and these expectations are clearly articulated for students
* is designed well – we have matched the appropriate assessment method to the type of learning target we are measuring and have accounted for bias and distortion and have an adequate sample of evidence.

To use the results of an assessment effectively, we attend to the development of good communication systems and we involve students in the assessment process, remembering that if we want success for students, they are the primary users of the majority of assessment data produced. Modules 2 and 3 dealt with the purpose and outcomes of your assessment. Module 5 will help you refine your learning targets and match them to an appropriate assessment method.

[Slide 5] - This module tackles the curriculum question that intersects with the assessment work we are engaged in. You may have a high level of confidence about the standards you have selected to use as learning targets. After all, creating an assessment assumes you are clear about the outcomes you wish to assess. If you would like to detour a bit to think about selecting standards to measure – proceed through this module – otherwise, progress to module Five.

Have you heard people say “we assess what we value most”? Sometimes we assess what is easiest to assess and neglect assessing standards that include complex products, skills or reasoning processes. We also have conflicting messages about whether or not we should assess dispositions (behaviors and attitudes). In reality, the 21st century our students are encountering demands high level skills, intellectual competencies, attitudes of engagement, caring and commitment.

This module will provide discussion and three exercises to encourage faculty to tackle assessing the entire range of targets that comprise the complex, rigorous, and worthwhile standards we set for students that are necessary for their future success. Preview the first half of this module (through Slide 17) and determine if the content will be helpful to your group. The two articles and one video clip with accompanying slides and discussion questions are provided for your consideration use all, some or none (they are options).

This module will also provide a set of criteria to consider as you decide which standards to invest energy in deconstructing, then turning into learning targets as the basis of your common assessment.

[Slide 6] - The first outcome of this module encourages you to assess standards or outcomes you believe are important – we are going to suggest that considering the demands of the 21st century learner will provide encouragement and support for decisions educators make about selecting standards upon which to base common assessments.

[Slide 7] - In a 2010 Keynote address at an Education Conference in York, Dylan Wiliam (researcher and coauthor of “Inside the Black Box”) explained the changing demands of the 21st century using data depicting job demands and education preparation. For the sake of discussion, consider these categories of skills necessary for various categories of work.

1. Routine manual
2. Non-routine manual
3. Routine Cognitive
4. Complex communication
5. Expert thinking/problem-solving.

[Slide 8] - Take a few minutes to review the slide and discuss with a partner.

* What are your observations?
* Which categories are in decline with respect to matching the demands of available employment?
* Which categories are increasing?
* Are you surprised by these data?

Source- Autor, D., Levy F., Murnance, R. 2003. *The Skill Content of Recent Technological Change and Empirical Exploration*. Quarterly Journal of Economics 118 (4).

[Slide 9] - This slide shows that over the last eight years, the UK economy has shed 400 no-qualification jobs **every day.** These researchers have noted recessions accelerate this trend.

We could conclude that the type of thinking and skills demanded in the two categories **complex communication** and **expert thinking and problem solving** become our new normal or target sets if we hope to move all students into the world of work hoping to achieve economic independence.

[Slide 10] - Many jobs considered “blue-collar” involve expert thinking as well as manual labor; workers continually encounter new problems for which they have to construct new solutions. For example, today’s auto repair technicians use computer-based diagnostic tools to test cars—but expert thinking must kick in when the computer diagnostics indicate that all systems are functioning yet the car is not performing adequately.

Complex communication is the ability to not only elicit and transmit information but also convey a particular interpretation of information to others. Jobs in teaching, selling, managing, and negotiation require this set of skills. If a student downloads a calculus lesson from a teaching Website, the student will have access to the information—but there is no guarantee that the student will understand it. It takes a good teacher to present the information in a way that helps students translate information into usable knowledge. Complex communication is equally important in sales. Customers who know exactly what they want can order from a Website without human interaction. But only subtle human contact can convince a reluctant customer to buy. Good salespeople are continually modifying their arguments as they read the customer’s facial expression and listen to the customer’s questions. Selling is difficult to express in rules, and so it remains a human. Routine manual work (such as manufacturing products on an assembly line) and routine cognitive work (such as filing and bookkeeping) are the easiest types of tasks to computerize.

What Should Schools Focus On?

Although it is crucial for schools to help students gain expert thinking and complex communication skills, they should not stop teaching basic skills .People must have literacy and math skills to become expert thinkers in any field. And students can learn the skills needed to be good at complex communication and expert thinking as they study any subject area. The challenge posed by a changing economy is not to teach new subjects, but to teach all subjects so that students develop complex understanding and communication skills. Young people will need these complex skills to succeed in additional education or training and in almost any job that pays a decent salary.

[Slide 11] - Turn to a partner and discuss the following question…

What implications does this quote have for the selection of standards you may choose to turn into learning targets for the purpose of assessing student learning or proficiency?

For a more thorough group activity investigate the question, “Which human skills does the labor market value?” by engaging your group in a jigsaw reading activity using the article, *Education and the Changing Job Market: An Education Centered on Complex Thinking and Communicating is a Graduate’s Passport to Prosperity*, Frank Levy and Richard Murnane, Educational Leadership, October 2004. These researchers (Levy at MIT and Murnane at Harvard) published, *The Skill Content of Recent Technological Change an Empirical Exploration* in the Quarterly Journal of Economics in 2003. This study preceded the Ed Leadership article.

[Slide12] - For many reasons we continue to conduct school in a manner that was designed for 19th and 20th century learners. But 21st century literacies (initiated by technology, globalization, communication systems and rapid rates of change) are suggesting that we could be conceptualizing school differently because how and where students are learning is changing (whether we change the structure of school or not). In addition to how we structure school, the **what** we emphasize in terms of standards may require our careful consideration.

[Slide13] - As you watch this video you might jot down phrases that captivate you, note the words used to describe the thinking and activities students are engaged in as a necessary part of functioning in the 21st century.

(Slide 14) - Look at your list of words and phrases. What do these words imply to you about the literacies students will need for the 21st century? Discuss with a partner the types of assessment you think might help you assess 21st century literacy.

Another resource for your consideration is the Partners for the 21st Century website. There are a set of videos posted that show what 21st century literacies look like now. http://p21.org

[Page 15] - Have you heard the term “college and career ready”? The interesting and compelling argument embedded in the term “college and career ready” is the degree to which “college-ready” and “work-ready” are the same. The idea is that there is a foundational set of knowledge and skills that spans school, work and citizenship which can and should be taught to all students. Tony Wagner, co-director of the Change Leadership Group at Harvard Graduate School of Education, makes the case in his book The Global Achievement Gap (2010) there is one set of necessary skills and dispositions students need to succeed in the world of work, in their community as citizen, and in college coursework.

Note: The 7 Survival Skills identified by Wagner (as the result of interviews with all sectors and industries) are listed (Slide 15 and below) do not need to read aloud.

1. critical thinking/problem solving

2. collaboration/leading by influence

3. agility and adaptability

4. initiative and entrepreneurialism

5. effective oral and written communication

6. accessing and analyzing information

7. curiosity and imagination

•Are these skills thoroughly infused in our current curriculum expectations for students?

•Are we currently assessing these skills? If yes, how – If no, why not?

(Note: Optional Observation/Comment) - David T. Conley, in his 2010 publication College and Career Ready, indicates a helpful step toward fusing the two: high schools need to prepare students for postsecondary success, which is more than just being eligible to enroll in a college or being able to put a resume into a job pool. Postsecondary readiness implies the ability to succeed in the myriad certificate programs at community college and a range of formal training programs offered after high school. Career readiness means a student qualifies for and is capable of eventually moving beyond an entry-level position within a career cluster. It means cultivating the ability to select an occupation in a career pathway rather than having to take whatever job comes along. Both college- and career-ready require high skill levels, along with a set of work habits and self-knowledge that hasn’t been well infused in our current secondary curricula or community expectations.

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[Slide16] – For educators wanting a more thorough understanding of these 7 survival skills, use the October 2008 Educational Leadership article, by Tony Wagner titled “Rigor Redefined.”

The excerpt from the end of that article, printed here, provides affirmation for educators who are working to develop a full assessment system that includes an emphasis on the important skills, abilities and big ideas students need to be successful in the future.

“To teach and test the skills that our students need, we must first redefine excellent instruction. It is not a checklist of teacher behaviors and a model lesson that covers content standards. It is working with colleagues to ensure that all students master the skills they need to succeed as lifelong learners, workers, and citizens. I have yet to talk to a recent graduate, college teacher, community leader, or business leader who said that not knowing enough academic content was a problem. In my interviews, everyone stressed the importance of critical thinking, communication skills, and collaboration. We need to use academic content to teach the seven survival skills every day, at every grade level, and in every class. And we need to insist on a combination of locally developed assessments and new nationally normed, online tests—such as the College and Work Readiness Assessment [www.cae.org](http://www.cae.org)) that measure students’ analytic-reasoning, critical-thinking, problem-solving, and writing skills. It’s time to hold ourselves to a newer and higher standard of rigor, defined according to 21st-century criteria. It’s time for the profession to advocate for accountability systems that will enable us to teach and test skills that matter most.”

“Rigor Redefined,” Educational Leadership Oct. 2008 Vol. 66 No. 2 pg. 25

[Slide17] - We have just examined students’ possible futures through the lens of 21st century demands or literacies. The moral to the story or ending thought for this section of this module is the following…

**If we assess what we value, what we value needs to be what prepares students for their future.**

[Slide18] - We’ve dedicated some time to talking about standards that are important with respect to preparing students for future demands of the 21st century. The second outcome in this module provides a set of criteria to use when selecting standards to turn into learning targets for your common assessments.

Think about the criteria **Important** in two ways – is the standard or target important to the discipline (for example, to make sense of history students must understand cause and effect of significant events) **and** is the standard or target important to the student’s future (or example, will it be useful 5, 10, 15 years from now)? You want to select standards or targets to assess that are important in one or both ways.

Do the standards/targets have **leverage** – in other words do they contain enabling knowledge and skills?

Are the standards/targets **appropriate**? This criterion speaks to appropriate with respect to collecting the information or evidence needed to understand what students know and can do at a given point in time and relative to the purpose of the assessment.

Are the standards/targets selected **clear** – in other words, do both the teacher and learner know what they are aiming for (the teacher may need to deconstruct or unpack a standard in order to turn it into a learning target) once unpacked the student needs a target in student-friendly or easily understood (age/grade appropriate language). When a standard or target is clear, it becomes **measureable** through attention to the choice of verbs we embed in the target that reflect the type of thinking or level of performance we are eliciting and we are able to correctly match our assessment method to our target type.

Finally, we look at the cluster of standards or targets we choose to assess across a marking period, course, or in a given assessment, to determine if we are unwittingly choosing to assess a particular type of target more than other target types. With this criterion, we strive to achieve **balance** in our common assessment.

[Slide19] - We have talked about selecting targets to assess that will be important in the future. We’ve talked about the skills and abilities necessary to be a successful learner in the 21st century.

A second aspect to the criterion of **important** – is important to the discipline. Each content area has some overarching skills and abilities that are essential to the discipline. For example when we think like historians we must be able to understand cause and effect.

A useful exercise to determine essential knowledge in a discipline can be answering the question, “What does it take to think like a \_\_\_\_\_ (scientist, mathematician, writer, etc.).” You fill in the blank. Some of your curriculum documents provide helpful guidance to prompt your thinking. The new common core has a set of process standards that provide one example for mathematics. In Michigan many ISDs have created Power Standards or Priority Expectations.

[Slide 20] - **Leverage -** This criterion will be answered through referencing curriculum documents and instructional materials and by relying on teacher expertise with respect to disciplinary knowledge and regarding student’s developmental abilities. For example, if we are developing an end-of-course assessment for Spanish I, we would consult the curriculum documents and instructional materials for Spanish II to ensure selecting targets that are necessary prerequisite skills and knowledge to progress. The types of curriculum documents you may have to draw from could include curriculum maps, pacing guides, syllabi for upper grades or developmental continua for emerging skills (especially reading, writing and mathematics).

When we select standards or targets that have leverage, we succeed in making our curriculum coherent. We connect to learning and instruction that came before and learning and instruction that will come after.

[Slide 21] - Appropriate targets provide useful information at a given point in time. We assess students before we begin instruction, during and after. We need to make sure the targets we elect to assess match the purpose of the assessment. This criterion is about eliciting evidence that is useful at a given point in time.

[Slide 22] - Table 4.1 provides suggested guidance for selecting appropriate targets.

When selecting targets to assess, you would be asking “Are these targets apt to provide the type of information needed for the type of assessment we are developing?”

[Slide 23] - The power of using learning targets as part of the teaching and learning cycle occurs when targets are made explicit for students before instruction occurs. And assessments of learning (the end of course or interim benchmark type) are only fair when our targets are explicit and remain constant. When the target stands still we have valid and useful information. When the students know what the target is, they can take aim and take action to close the gap between desired and current performance.

Articulating a learning target, making it clear to students, teaching to the target and assessing proficiency against the target is the essence of what we call “standards-based” education. We are assessing proficiency against a standard.

[Slide 24] - We deconstruct or unpack standards in order to make them assessable and to make them clearer to a student. Take, for example, the sample standard “Produce writing to communicate with different audiences for a variety of purposes.” One method for deconstructing or unpacking this standard to make it assessable and more easily understood by the learner is to systematically ask ourselves these questions in relation to that standard.

1. What types of writing would students need to produce? (for example, at grade one students might write single sentences for a variety of reasons)
2. What underpinning skills will the student need to produce that type of writing? (for example, at grade one students will need to print letters correctly , hold a pencil correctly, use lines and margins correctly and so forth)
3. What underpinning reasoning skills will the student need to produce that type of writing? (following our grade one example, students would need to be able to distinguish the uses or meaning of a variety of words)
4. What must a student know to produce that type of writing? (grade one students would need to know what a sentence is and understand the concept of word choice)

Do any of you play golf? The act of golfing well is a package that requires deconstructing so the golfer can work on various aspects of their game. The same concept applies to standards.

[Slide 25] - After unpacking or deconstructing standards into learning targets the next step that achieves clarity for students is turning learning targets into,” I can” statements.

Have you seen this example used by the Assessment Training Institute about driving?

The process often recommended for converting a target to student friendly language includes these three steps:

1. Identify the words or phrase needing clarification. Usually you are focusing on content area vocabulary embedded in the target or the verb that suggests the expectation of performance.
2. Define the word or phrase needing clarification (use the dictionary and your curriculum or instructional materials), and
3. Convert the definition into language students would understand –consider beginning this phrase with… “This means I can…”

(Slide 26) “When students know what they are learning, their performance on the average has been shown to be significantly higher (up to 27 percentage points) than that of students who do not know what they are learning.”

Marzano, 2005

[Slide 27] - This criterion is addressed in detail in Module 5. Three issues contribute to targets that are measureable. First, if the target is clear – we should be able to identify the type of thinking or action expected. Being attentive to the verbs we choose to use in targets suggests the type of thinking or performance expected. Second, you will want to examine learning targets to determine if multiple expectations are nested in one target and third, you will be attentive to matching the selected assessment method to the type of thinking or action the learning target expresses in order to elicit accurate evidence of learning.

[Slide 28] - This abbreviated example in Table 4.2 demonstrates a sample progression from Target Type to a possible verb choice to reflect the type of thinking or performance desired in the target and the assessment method that might be the most effective or efficient match to elicit evidence for the type of learning target assessed. The concept of matching a target type to an assessment method, in the manner depicted above, has been adapted from examples and tools in the publication Student Involved Assessment for Learning, 4th Edition

[Slide 29] - This last criterion simply asks us to look at the range of learning targets we select, in a given assessment or across multiple assessments, in order to determine if we are choosing to select one type of target to the exclusion of other types. This criterion would be most important when your common assessment is being used as a final exam or end or course assessment. This criterion is the one that asks us to be careful not to assess only knowledge targets with selected response items that can be efficiently scored with the assistance of technology. In Susan M. Brookharts’ publication, How To Assess Higher-Order Thinking Skills she provides thorough discussion, examples and methods to achieve balance.

[Slide 30] - This may seem like a lot of fuss – that is, applying a set of criteria to help with selection of standards to turn into learning targets for an assessment – but we are talking about selecting a set of standards for a common assessment, and in most instances the decision to create a common assessment implies some significant amount of labor as well as agreement that the assessment information is going to be used to make important decisions for and about students or programs.

This one set of criteria straddles two worlds - the criteria identified as: Important, Leverage, and Clear are issues we sort out when we are developing, adopting or adapting curriculum.

The first part of this module provided several opportunities to engage in discussion and thinking about the skills, knowledge and dispositions students will need to be successful learners in the 21st century. We do need to put our effort into assessing the knowledge and skills that prepare students for their future. The criteria identified as appropriate, clear, measureable and balanced are issues we attend to when developing a quality assessment.

If you choose to review your selection of standards and development of learning targets utilizing these criteria we anticipate you will increase your level of confidence about the quality and potential effectiveness of your common assessment.