Tools for Looking Under the Hood of Competency-Based Education

September 12, 2017
The mission of the College and Career Readiness and Success Center (CCRS Center) is to foster the capacity of vibrant networks of practitioners, researchers, innovators, and experts to build and sustain a system of support for states as they implement strategies to improve college and career readiness and the eventual success of their students.
## Who?
State education agencies (SEAs).

## What?
Build SEA capacity to implement college and career readiness policies.

## How?
Provide technical assistance, including targeted and intensive support.

## Why?
Support SEAs to plan for and implement the Every Student Succeeds Act (ESSA).

www.ccrscenter.org  
CCRSCenter@air.org
Engaging With Us

Postevent feedback survey

Recorded webinar

http://www.ccrscenter.org/products-resources/ccrs-center-webinars-events
Today’s Presenters

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CCRS Center

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American Institutes for Research

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Senior Researcher
American Institutes for Research
The Traditional System . . .

- Is built upon an institutional fixed mindset
- Has high variability in how teachers determine proficiency
- Is time-based
- Is organized to deliver curriculum efficiently
- Depends on extrinsic motivation
Competency Education intentionally designs the **culture and structure of schools** so that all students will succeed in being prepared for college, career, and life based on what we know about learning, engagement, and motivation.

**Five Elements of Competency Education**

- **Students advance upon demonstrated mastery.**
- **Competencies include explicit, measurable, transferable learning objectives that empower students.**
- **Assessment is a meaningful and positive learning experience.**
- **Students receive timely and differentiated support.**
- **Students develop and apply a broad set of skills and dispositions.**
Personalization and competency education go hand in hand.

Without competency education, personalization may result in variable achievement.

Without personalization, it is unlikely that all students will achieve outcomes.
A Snapshot of K–12 Competency Education State Policy (2012)

**Advanced States**
Those states with clear policies that are moving towards proficiency-based; more than just an option.

**Developing States**
Those states with pilots of competency education, credit flexibility policies, or advanced next gen policies for equivalents to seat-time.

**Emerging States**
Those states with waivers, task forces.

**ILN States**
Since its inception, the Innovation Lab Network (ILN) engaged schools, districts, and state education agencies working to identify through local efforts new designs for public education that empower each student to thrive as a productive learner, worker, and citizen. The states’ responsibility is to establish conditions in which innovation can flourish and to develop capacity to sustain and scale what works through policy. The Council of Chief State School Officers (CCSSO) facilitates this network of states to support programmatic, policy, and structure design work within each participating states and across the network.

**No Policies in Competency Education**
States with seat-time and no competency education policies.
A Snapshot of K–12 Competency Education State Policy (2017)

**Advanced States**
Those states with comprehensive policy alignment and/or an active state role to build capacity in local school systems for competency education.

**Developing States**
Those states with open state policy flexibility for local school systems to transition to competency education.

**Emerging States**
Those states with limited flexibility in state policy—usually requiring authorization from the state—for local school systems to shift to competency education, for exploratory initiatives and task forces, and/or with minimal state activity to build local capacity.

**No Policies in Competency Education**
States with no state-level activity and enabling policies for competency education. Significant policy barriers may exist, such as inflexible seat-time restrictions.

**ILN States**
The Innovation Lab Network (ILN) is a group of states facilitated by the Council of Chief State School Officers (CCSSO) taking action to identify, test, and implement policies to support student-centered approaches to learning.
Four Challenges

- Equity
- Quality
- Meeting students where they are
- Policy fit for purpose
Pat Fitzsimmons
Team Leader, Proficiency-Based Learning
Act 77: Flexible Pathways to Graduation . . .

“means any combination of high-quality academic and experiential components leading to secondary school completion and postsecondary readiness, which may include assessments that allow the student to apply his or her knowledge and skills to tasks that are of interest to that student.”
Vermont Education Quality Standards

2120.7. Graduation Requirements:

• Students need to demonstrate evidence of proficiency in locally determined graduation requirements.

• Graduation requirements include both content and transferable skills.

• Students are expected to graduate in proficiency-based systems by June 2020.
Teams Aligned to the Education Quality Standards

<table>
<thead>
<tr>
<th>Proficiency-Based Learning Team</th>
<th>Personalized Learning Team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-Tiered System of Supports</td>
<td>Education Quality Assurance</td>
</tr>
</tbody>
</table>
Establishing a Foundation

• Developed documents with a Vermont context:
  – What is proficiency-based learning?
  – Why is proficiency-based learning important?
  – What are the key characteristics of a proficiency-based system of education?

• Proficiency-based learning glossary
• Sample proficiency-based graduation requirements
• Transferable skills scoring criteria
Where Is Vermont Headed?

• Identifying “bright spots.”
• Convening networking meetings to develop a profile of a Vermont graduate.
• Reviewing proficiency-based grading recommendations from national experts and identifying strengths and challenges of current practices.
• Collaborating with the field to define the critical elements of a personalized learning plan (PLP) and examining how PLPs might differ from grade level to grade level.
• Working with instructional coaches to ensure that they have the tools and knowledge to work effectively with teachers.
Jen Sigrist, Director of Personalized Learning and Innovation
CBE Through a Local Lens

Van Meter Schools
Van Meter, Iowa
www.vmbulldogs.com #vanmeter
Key Iowa Competency-Based Education (CBE) Milestones

2010
Established the Competency-Based Education Task Force

2012
Passed Senate File 2284 eliminating seat-time requirements

2012
Created PK–12 CBE guidelines

2013
Funded a 10-district CBE Collaborative Network House File 215

2013–2018
CBE Collaborative leads development of statewide framework and strategic plan

Stop in funding July 2017

• Developing supports through AEA system
• State support through membership to CCSSO ILN
• Creating online spaces for continued discussion and collaboration

#IACompEd
IOWA Department of Education
Entry Points Into the Work

- Van Meter Vision
- Standards-Based Grading
- A Multi-Tiered System of Supports (MTSS or RtI)
- 21st-Century Learning Skills (our vision points)
Van Meter Vision Points

- Communication
- Collaboration
- Creativity and Innovation
- Problem Solving
- Thinking Globally
- Employability Skills
- Grit

### Collaboration: I can effectively contribute to a process with others to achieve common goals.

<table>
<thead>
<tr>
<th>K-2</th>
<th>Students can:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Cooperate with others</td>
<td></td>
</tr>
<tr>
<td>- Take turns to give all students a voice</td>
<td></td>
</tr>
<tr>
<td>- Listen to others as they share their ideas</td>
<td></td>
</tr>
<tr>
<td>- Work together to solve problems as they arise with teacher guidance</td>
<td></td>
</tr>
<tr>
<td>- Actively participate in the group's activities</td>
<td></td>
</tr>
<tr>
<td>- Stay focused on the common goal</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3-5</th>
<th>Students can:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Cooperate with others</td>
<td></td>
</tr>
<tr>
<td>- Take turns to give all students a voice</td>
<td></td>
</tr>
<tr>
<td>- Work together to solve problems as they arise with teacher guidance</td>
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<tr>
<td>- Stay focused on the common goal</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6-8</th>
<th>Students can:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Understand that conflict is inherent and important to the process of working with others</td>
<td></td>
</tr>
<tr>
<td>- willingness to work with a diverse population</td>
<td></td>
</tr>
<tr>
<td>- able to recognize conflict and work to resolve it appropriately</td>
<td></td>
</tr>
<tr>
<td>- Recognize the contributions of others</td>
<td></td>
</tr>
<tr>
<td>- Complete unequal shares of the work</td>
<td></td>
</tr>
<tr>
<td>- Complete a task in a timely manner</td>
<td></td>
</tr>
<tr>
<td>- Stay focused on the common goal</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>9-12</th>
<th>Students can:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Manage and resolve conflict when appropriate</td>
<td></td>
</tr>
<tr>
<td>- Recognize and use others' good ideas</td>
<td></td>
</tr>
<tr>
<td>- Listen to feedback from all group members</td>
<td></td>
</tr>
<tr>
<td>- Communicate on the diversity of group members</td>
<td></td>
</tr>
<tr>
<td>- Complete an equal share of the work</td>
<td></td>
</tr>
<tr>
<td>- Complete work in a timely manner</td>
<td></td>
</tr>
<tr>
<td>- Stay focused on the common goal</td>
<td></td>
</tr>
</tbody>
</table>

| **I can exercise flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal.** | **I can conduct myself in a respectful, professional manner in a group setting.** |

<table>
<thead>
<tr>
<th><strong>Van Meter</strong></th>
<th><strong>Communication</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Have an awareness of classmates’ feelings and opinions</td>
<td></td>
</tr>
<tr>
<td>- Take feedback from others</td>
<td></td>
</tr>
<tr>
<td>- Accept constructive feedback from peers and friends</td>
<td></td>
</tr>
<tr>
<td>- Use feedback to improve one’s work</td>
<td></td>
</tr>
<tr>
<td>- Use a nice voice when talking</td>
<td></td>
</tr>
</tbody>
</table>

**Personalized. Innovative. Global.**
Hang-Ups

• Common Vocabulary: What’s the difference between—personalized, competency-based, standards-based, proficiency, and mastery?

• What does it look like?
  – If you could just show me it, I’ll ”tweak” what I see.

• Logistics
  – Schedule
  – Space
  – Keeping track of kids and standards
## CBE Map (innovative configuration map)

### Principle 3: Students engage in assessment as a meaningful and positive learning experience.

<table>
<thead>
<tr>
<th>CBE Principle</th>
<th>Initial practices</th>
<th>Intermediate practices</th>
<th>Advanced practices that may go beyond a single classroom</th>
<th>Practices a building and/or district enact with teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher seeks input or feedback from a peer about a scoring document being used in the classroom.</td>
<td>Definition of proficiency is shared with students to help students understand what proficiency looks like before they undertake the learning.</td>
<td>Teachers collaborate to establish common descriptors of proficiency for the demonstration of competencies.</td>
<td>Teacher, student, and parent teams collaborate with other professionals to determine what mastery of the competencies looks like in the world outside of school.</td>
<td></td>
</tr>
<tr>
<td>Note: Collaboration in this descriptor is seen as among other teachers and with students.</td>
<td>Students may see examples of work from multiple classrooms as part of the description of quality.</td>
<td>Exemplars of what proficiency looks like are agreed upon in collaborative teacher teams.</td>
<td>Collaboratively (teacher with teacher and teacher with student) determine and revisit understanding of student demonstration of proficiency.</td>
<td></td>
</tr>
<tr>
<td>SCALE - Stanford Performance Assessments</td>
<td>Students co-construct criteria to make proficiency visible.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AIW collaboration protocols</td>
<td></td>
<td></td>
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<td></td>
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</tbody>
</table>
Looking Under the Hood of Competency-Based Education

Three Key Research Questions:

1. How do policies and practices differ between CBE and comparison schools?

2. What are students’ experiences of CBE in the classroom?

3. What is the relationship between students’ CBE experiences and their learning capacities?
What do we really mean by CBE?

<table>
<thead>
<tr>
<th>1. Learning targets</th>
<th>are explicit, shared with students, and based on rigorous college and career readiness standards.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Measurement of learning</td>
<td>is based on the mastery of specific learning targets rather than a student’s level of participation, effort, or time in the classroom.</td>
</tr>
<tr>
<td>3. Instructional approaches and supports</td>
<td>are individualized to each student’s needs, are relevant and varied, and offer students ample opportunity to exercise independence and take responsibility for their own learning.</td>
</tr>
<tr>
<td>4. Assessment of learning</td>
<td>offers students flexibility and choice in when and how they show what they learned.</td>
</tr>
<tr>
<td>5. Pacing and progression</td>
<td>give students flexibility for taking more or less time to learn and require them to show what they have learned before earning credit or advancing.</td>
</tr>
<tr>
<td>6. When and where learning takes place</td>
<td>lets students learn and earn credit for activities that take place outside the school building and school day.</td>
</tr>
</tbody>
</table>
How might CBE benefit students?

- School-level CBE policies and practices
- CBE classroom learning opportunities
- Student experiences of CBE
- Positive changes in students’ learning capacities
- Improvement in academic outcomes
Study of CBE

• Funded by the Nellie Mae Education Foundation
• Time frame: 2 years (January 2014–December 2015)
• Design
  – Descriptive and matched comparison study
  – Examination of implementation and associations between students’ exposure to CBE and changes in learning capacities (CBE and comparison schools combined)
• Sample
  – 10 CBE high schools from three states participating in the Council of Chief State School Officers (CCSSO) Innovation Lab Network (ILN): New Hampshire, Wisconsin, and Kentucky, and
  – Eight comparison high schools.
    » Selected comparison schools with similar student demographics
# Measures and Data Collection

<table>
<thead>
<tr>
<th>Fall 2014</th>
<th>Spring 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student Baseline</strong></td>
<td><strong>Student Follow-Up</strong></td>
</tr>
<tr>
<td><strong>Sample:</strong> Four CBE and four comparison schools</td>
<td><strong>Sample:</strong> Four CBE and four comparison schools</td>
</tr>
<tr>
<td>Sample: Four CBE and four comparison schools</td>
<td>Sample: Four CBE and four comparison schools</td>
</tr>
<tr>
<td>Student surveys: ninth-grade students’ self-reported learning capacities:</td>
<td>Student surveys: ninth-grade students’ self-reported learning capacities:</td>
</tr>
<tr>
<td>- Mindsets and dispositions,</td>
<td>- Self-reported learning capacities and</td>
</tr>
<tr>
<td>- Self-regulated learning, and</td>
<td>- Reports of CBE experiences.</td>
</tr>
<tr>
<td>- Academic behaviors.</td>
<td></td>
</tr>
<tr>
<td><strong>Teachers and Administrators</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Sample:</strong> All 18 CBE and comparison schools</td>
<td>Administrator survey</td>
</tr>
<tr>
<td><strong>Sample:</strong> All 18 CBE and comparison schools</td>
<td>Core content teacher survey (Grades 9–12)</td>
</tr>
</tbody>
</table>
Your Experiences as a Teacher

Clarity of Learning Targets

20. (if yes) How do you communicate required learning targets to your students? (Check ALL that apply.)

- Students receive a list of learning targets, competencies, and/or proficiencies they must meet to pass and get credit.
- Students receive a list of learning targets, competencies, and/or proficiencies for each assignment.
- All students have learning targets and/or requirements listed in an individual or personalized learning plan.
- I meet one-on-one with each of my students to discuss learning targets.
### What I Think About My Math Course

#### Clarity of Learning Targets

17. How much do you agree with these statements about your **math** course?

<table>
<thead>
<tr>
<th>In my math course,</th>
<th>Don’t Agree</th>
<th>Agree a Little</th>
<th>Mostly Agree</th>
<th>Agree a Lot</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. I understand exactly what I need to learn to pass and get credit.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b. I know exactly what I am trying to learn when I work on a math assignment.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c. I know ahead of time what knowledge and skills I will need to demonstrate on a math test or assessment.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
Key Finding: Teachers in CBE settings are more likely to report implementing CBE policies and practices in several areas.

- **Learning targets**
  - Meeting with students individually to discuss learning targets

- **Learning recognition**
  - Proficiency demonstrated to earn course credit

- **Assessment**
  - Greater flexibility in retaking assessments and demonstrating competency in alternative ways

- **Instructional practices**
  - Greater use of technology
  - Individual meetings with students to discuss their progress
  - Personalized learning plans (PLPs) for all students.

- **Pacing**
  - Greater pacing flexibility for students
Key Finding: Lots of Variation!

- Substantial variation within schools.
- Many teachers in comparison schools report implementing practices commonly associated with CBE.
Student Reports of Their CBE Experiences

**Differences: Students in CBE schools were . . .**

- More likely to report having a PLP, and
- More likely to meet with an adult regularly to discuss their learning.

**There were no meaningful differences between student experiences in CBE and comparison schools in most areas, including:**

- Clarity of learning targets
- Expectation that students meet learning targets to earn credit
- Opportunities to make decisions about their learning
- Opportunities to take online courses or learn outside school for credit
- Opportunities for retaking examinations
What is the link between student experiences of CBE features and outcomes?

Clear learning targets

Intrinsic motivation and self-management
What is the link between student experiences of CBE features and outcomes? (cont.)

Expectation for demonstrated mastery to earn credit

Self-efficacy
Cognitive control
Intrinsic motivation
What is the link between student experiences of CBE features and outcomes? (cont.)

Flexible course pacing

Self-efficacy
Intrinsic motivation
What are your takeaways?
What were our takeaways?

- Exposure to CBE practices shows promise for benefitting students.
- Using the CBE label is not enough to ensure that students will be exposed to the full range of CBE practices.
- Consistent implementation at the classroom level is the key to outcomes!
• User Guide
• Teacher and student CBE surveys
• Construct map
• Checklist, administration instructions, and sample consent forms
• Online survey template
• Technical appendix

http://www.ccrscenter.org/products-resources/cbe-360-survey-toolkit
The User Guide is organized around five key steps.

- **STEP 1**: Decide if the CBE surveys are right for you.
- **STEP 2**: Adapt the surveys and administration process to fit your needs.
- **STEP 3**: Administer the CBE surveys to students and teachers.
- **STEP 4**: Explore your survey results.
- **STEP 5**: Make sense of (and use!) your survey findings.
**CBE360°**

**STEP 1**

**DECIDE IF THE CBE SURVEYS ARE RIGHT FOR YOU**

- Do the surveys measure CBE features of interest to your school or district?
- What are the key characteristics of the surveys?
- Are the CBE surveys suitable for your school or district’s assessment purposes?

**STEP 2**

**ADAPT THE SURVEYS AND ADMINISTRATION PROCESS TO FIT YOUR NEEDS.**

- Who will respond to the survey?
- Which CBE features and academic subjects will you include in your survey?
- What other demographic or CBE-related information will you collect?
- When will you administer the survey?
### Appendix C. Student CBE Experiences and Teacher CBE Practices Surveys Construct Map

#### Instructional Approaches and Supports

<table>
<thead>
<tr>
<th>Feature Area</th>
<th>Student Survey Items</th>
<th>Teacher Survey Items</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student Autonomy and Decision Making</strong></td>
<td><strong>Course specific</strong>&lt;br&gt;<a href="#">Item set. Use all items.</a>&lt;br&gt;Items: 20/26. In your math/English course, who makes the following decisions? (Response options: My teacher decides, My teacher and I decide together, I decide)&lt;br&gt;In your math/English course, who decides&lt;br&gt;a. Which topics you will learn each day in class?&lt;br&gt;b. Which activities or coursework you do during class?&lt;br&gt;c. What kinds of help/support you need in your math course?&lt;br&gt;d. The due date for your coursework?&lt;br&gt;e. How you will show what you learned (for example, whether you will take a test or do a project)?&lt;br&gt;f. When you will take a final exam or assessment to show what you have learned in the course?</td>
<td><strong>Course specific</strong>&lt;br&gt;<a href="#">Item set. Use all items.</a>&lt;br&gt;23. Teachers have many perspectives on student and adult roles in the classroom. We are interested in who makes decisions about student learning and participation in your course. Please read the following statements and tell us how decisions are typically made in this course. (Response options: I [teacher] decide, I [teacher] decide with some student input, The student and I [teacher] decide together, The student decides with some teacher input, The student decides on his/her own)&lt;br&gt;In your course, who decides&lt;br&gt;a. Which topics each student learns in class every day?&lt;br&gt;b. Which activities or coursework each student does during class?&lt;br&gt;c. What activities or coursework each student does outside of class or learning time (e.g., homework)?&lt;br&gt;d. How fast or slow each student moves through the course content?&lt;br&gt;e. The due date for each student’s coursework?&lt;br&gt;f. What kinds of help and support each student needs?&lt;br&gt;g. How each student will show what he or she learned (e.g., whether students will take a test, write a paper, make a presentation, etc.)?&lt;br&gt;h. When each student will take a final exam or assessment?</td>
</tr>
</tbody>
</table>
STEP 3

ADMINISTER THE SURVEYS TO STUDENTS AND TEACHERS.

• Obtain consent
• Assign respondent identifiers and protect confidentiality
• Determine survey administration dates, times, and logistics
• Prepare online (or paper) survey
• Prepare for survey administration day
• Orient staff to administer the student survey
• Administer survey to students and teachers
Appendix D. Consent Guidance and Sample Parent/Guardian Consent Form

Sample Student Assent Language

Dear Student,

Welcome to the Student CBE Experiences Survey!

We are inviting you to complete this survey to help us better understand your school experiences.

Here is some important information for you to know before you get started:

There are no right or wrong answers. We just want your honest opinion.

This survey is confidential. Your individual answers will be kept confidential and will not be shared.

This survey is voluntary. You do not have to participate in this survey if you do not want to. If you decide not to participate, your teachers will give you another activity to do. If you do decide to participate, you can skip any question that makes you feel uncomfortable, but we hope you will answer as many questions as you can. If you have read the above information and agree to participate in the survey, please click the “Yes” button below to continue on to the survey, and click the “Submit” button when you are finished taking the survey. By doing so, you give us your permission to use your responses.

- Yes [skip to beginning of survey].
- No.
Appendix E.
Student CBE Experiences Survey Administration Instructions

Script

Please read the following introduction language to consented students:

[Note: Schools/districts, please insert information here to briefly explain the purpose of the survey]. In a few minutes, you will be invited to take an online survey. The survey will ask you for your opinions about your school, classes, schoolwork, and yourselves. There are no right or wrong answers to these questions. The survey is only asking for your thoughts and opinions. [Schools/districts: We recommend that you keep student survey responses confidential.] This survey is completely confidential, and your responses will not be shared with your teachers or parents or used by anyone except the [school/district] research team. The survey is not timed, so work at your own pace. This survey is voluntary; if you do not want to answer a question, you may skip it. Your answers to this survey are important, so you are encouraged to answer as many questions as you can. [Include if using an online platform with a Submit button.] Very important last step: Make sure that you click Submit when you have finished filling out the survey. Any questions before we get started?
STEP 4

EXPLORE YOUR SURVEY RESULTS.

• Examine responses to individual survey items
• Examine responses to item sets
• Disaggregate survey responses by subgroup
• Organize and display survey results in tables and graphs

STEP 5

MAKE SENSE OF (AND USE!) YOUR SURVEY FINDINGS

• Plan your data interpretation approach
• Engage stakeholders in interpreting survey findings
• Synthesize findings and identify target audiences with whom to share results
• Communicate (and use) your findings to improve CBE implementation
Sample Graph 3: Comparison of average ratings for learning target items for English and Math

How much do you agree with these statements about your Math/English course?

1. I know ahead of time what knowledge and skills I will need to demonstrate on a test or assessment (n=60)
   - English: 2.40
   - Math: 2.72

2. I know exactly what I am trying to learn when I work on an assignment. (n=60)
   - English: 2.23
   - Math: 3.27

3. I understand exactly what I need to learn to pass and get credit. (n=60)
   - English: 2.34
   - Math: 2.90

Average Student Rating:
1 = Don't Agree  2 = Agree A Little  3 = Mostly Agree  4 = Agree A Lot
## Technical Appendix

### Learning Targets

<table>
<thead>
<tr>
<th>Clarity of Learning Targets (Math) (course-specific)</th>
<th>17. How much do you agree with these statements about your math course?</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Missing</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In my math course...</td>
<td>2.4%</td>
<td>8.7%</td>
<td>54.2%</td>
<td>34.5%</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) I understand exactly what I need to learn to pass and get credit.</td>
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<td>b) I know exactly what I am trying to learn when I work on a math assignment.</td>
<td>3.7%</td>
<td>13.8%</td>
<td>54.3%</td>
<td>28.1%</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c) I know ahead of time what knowledge and skills I will need to demonstrate on a math test or assignment.</td>
<td>3.8%</td>
<td>18.5%</td>
<td>51.8%</td>
<td>25.5%</td>
<td>0.5%</td>
<td>0.85</td>
</tr>
</tbody>
</table>
Free, Survey Monkey template

Student CBE Experiences Survey

What I Think About My Math Course

18. How do you spend your time during math class?

When I am in math class,
How to Get Started?

1. Visit CCRS Center website to download materials.
2. Meet with your CBE colleagues to follow the User Guide.
3. Request Word versions and Survey Monkey templates that can be customized, when needed.

For more information, email CCRSCenter@air.org
Questions?
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Krissy Zeiser, Senior Researcher
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