Tools for Looking Under the Hood of Competency-Based Education

September 12, 2017





Mission

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.

CCRS Center

COLLEGE & CAREER
READINESS & SUCCESS Center

at American Institutes for Research



www.ccrscenter.org

CCRSCenter@air.org

Who?

What?

How?

Why?

State education agencies (SEAs).

Build SEA capacity to implement college and career readiness policies. Provide technical assistance, including targeted and intensive support.

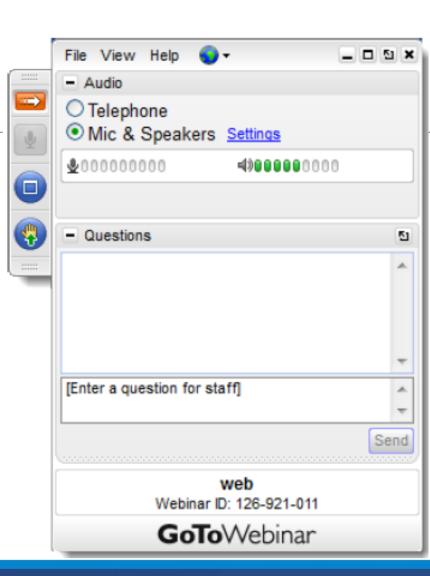
Support SEAs to plan for and implement the Every Student Succeeds Act (ESSA).

Engaging With Us

Postevent feedback survey —

Recorded webinar

http://www.ccrscenter.org/products-resources/ccrs-center-webinars-events



Today's Presenters



Susan Therriault Director CCRS Center



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Cofounder
CompetencyWorks



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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.



Assessment is a meaningful and positive learning experience.



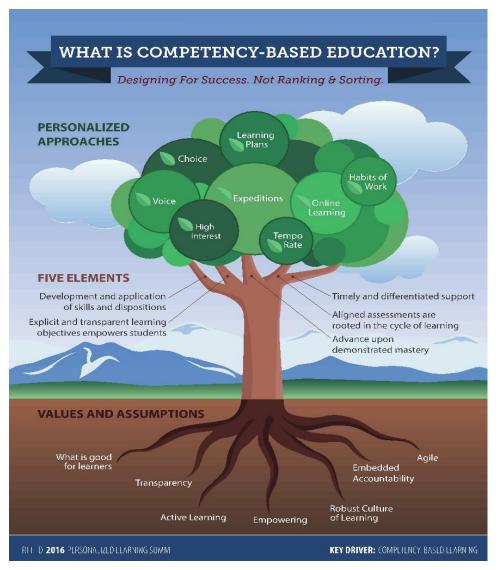
Competencies include explicit, measurable, transferable learning objectives that empower students.



Students receive timely and differentiated support.



Students develop and apply a broad set of skills and dispositions.

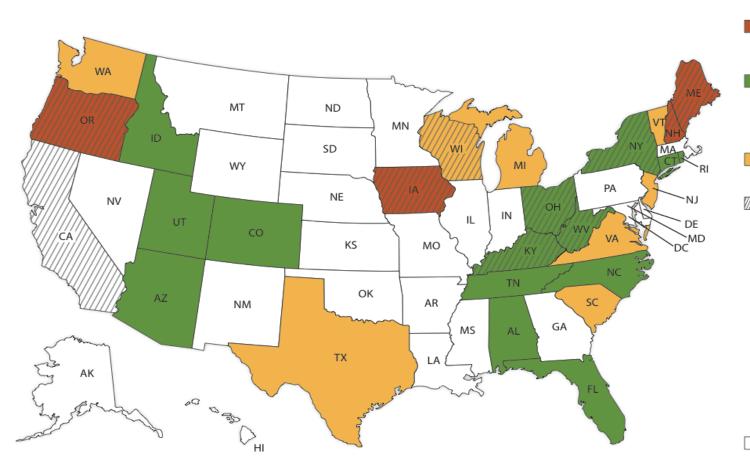


Personalization and competency education go hand in hand.

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.

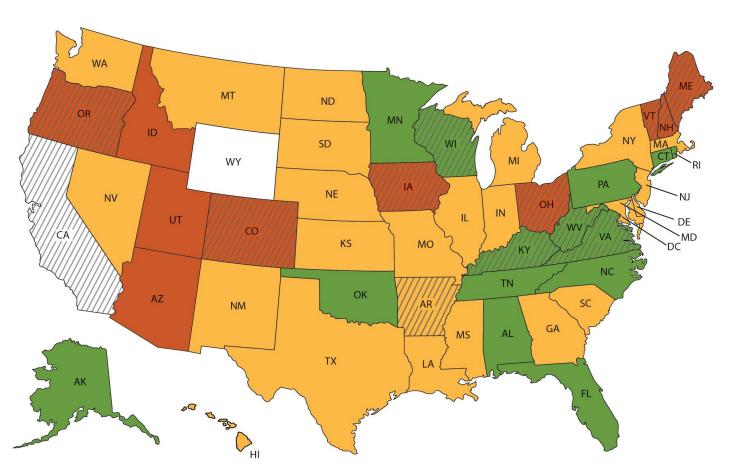
ILN States

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 state's 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

Proficiency-Based Learning Team Personalized Learning Team

Multi-Tiered System of Supports

Education Quality
Assurance



Establishing a Foundation

- Developed <u>documents</u> 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

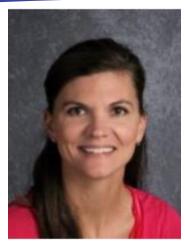


Where Is Vermont Headed?

- 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.





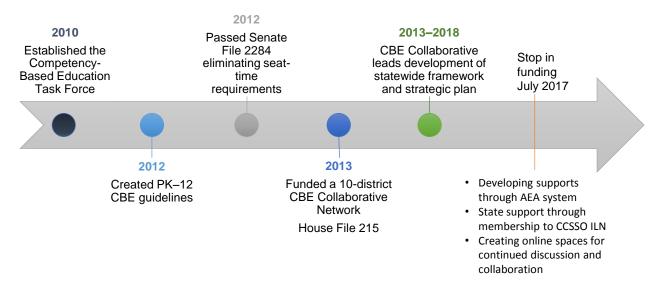


Jen Sigrist, Director of Personalized Learning and Innovation CBE Through a Local Lens

Van Meter Schools
Van Meter, Iowa
www.vmbulldogs.com #vanmeter

http://tinyurl.com/CBE-IowaDE

Key Iowa Competency-Based Education (CBE) Milestones





Entry Points Into the Work

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

Van Meter Vision Points

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



	I can foster a positive and productive team climate	I can exercise flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal	I can conduct myself in a respectable, professional manner in a group setting	
K-2	Students can: - Cooperate with others - Take turns to give all students a voice - Work together to solve problems as they arise with a teacher's guidance - Accepts working with students different than themselves - Listens attentively to peers - Complete an equal share of the work - Completes work in a timely manner - Stay focused on the common goal	Students can: - Inspire and influence others to contribute and share ideas - Self awareness of strengths - Recognize strengths in others	Students can: - Have an awareness of classmates' feelings and opinions - Take feedback from an adult - Uses words to express opinion - Accepts constructive feedback from peers without being offended - Uses a nice voice when talking	
3-5	Students can: - Cooperate with others - Take turns to give all students a voice - Work together to solve problems as they arise with minimal teacher's guidance - Accepts working with students different than themselves - Listens attentively to peers - Complete an equal share of the work - Completes work in a timely manner - Stay focused on the common goal	Students can: - Listen to and incorporate other ideas - Encourage others to complete their share of the work - Recognize others's strengths and be willing to follow them - Develop goals with teacher assistance to ensure goal completion	Students can: - Have an awareness of classmates' feelings and opinions - Take feedback from an adult - Accepts constructive feelback from peers without being offended - Use the feedback to improve their work - Uses a nice voice when talking - Uses words to express opinion or concerns	
6-8	Students can: - Understand that conflict is inherent and important to the process of working with others - Willing to work with a diverse population - Able to recognize conflict and work to resolve appropriately - Recongnize other's contributions - Complete an equal share of the work - Complete work in a timely manner - Stay focused on the common goal	Students can: - Willing to listen to and incorporate other ideas - Able to encourage others to complete their share of the work - Able to recognize others' strengths and be willing to follow them - Be willing to take leadership positions in different settings depending of the strengths needed to be successful - Be respectful of others' time - Develop posit that are SAMAT with teacher assistance - Ensure all members are contributing positively to group goals	Students can: - Able to accept constructive criticism - Able to give constructive criticism with justification - Able to incorporate other ideas to achieve goal	
9-12	Students can: - Manage and resolve conflict when appropriate - Recognize own and other's good efforts - Gather input from all group members - Capitalize on the diversity of group members - Complete an equal share of the work - Completes work in a timely manner - Stay focused on the common goal	Students can: - Lead or support when appropriate - Determine people's strengths and assign roles accordingly - Contribute to a team by sharing information and expertise - Accept and provide feedback in a constructive and considerate manner - Develop SMART goals with teacher guidance	Students can: - Listen to understand and appreciate the points of view of others: - Demonstrate respectful behavior to group member ideas and opinions: - Agree to disagree in a respectful manner in a group dynamic	

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)

CBE Princ ple	Initial practices	Intermediate practices	Advanced practices that may go beyond a single classroom	Practices a building and/or district enact with teachers			
Principle 3: Students engage in	Principle 3: Students engage in assessment as a meaningful and positive learning experience.						
Teachers collaborate to develop scoring documents that describe proficiency and focus on student learning. Note: Collaboration in this descriptor is seen as among other teachers and with students. SCALE - Stanford Performance Assessments AIW collaboration protocols	☐ Teacher seeks input or feedback from a peer about a scoring document being used in the classroom.	 Definition of proficiency is shared with students to help students understand what proficiency looks like before they undertake the learning. Students may see examples of work from multiple classrooms as part of the description of quality. Students co-construct criteria to make proficiency visible. 	Teachers collaborate to establish common descriptors of proficiency for the demonstration of competencies. Exemplars of what proficiency looks like are agreed upon in collaborative teacher teams.	Teacher, student, and parent teams collaborate with other professionals to determine what mastery of the competencies looks like in the world outside of school. Collaboratively (teacher with teacher and teacher with student) determine and revisit understanding of student demonstration of proficiency.			







Wendy Surr, Senior Researcher Krissy Zeiser, Senior Researcher Catherine Bitter, Senior Research Consultant

American Institutes for Research





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Looking Under the Hood of Competency-Based Education

Three Key Research Questions:

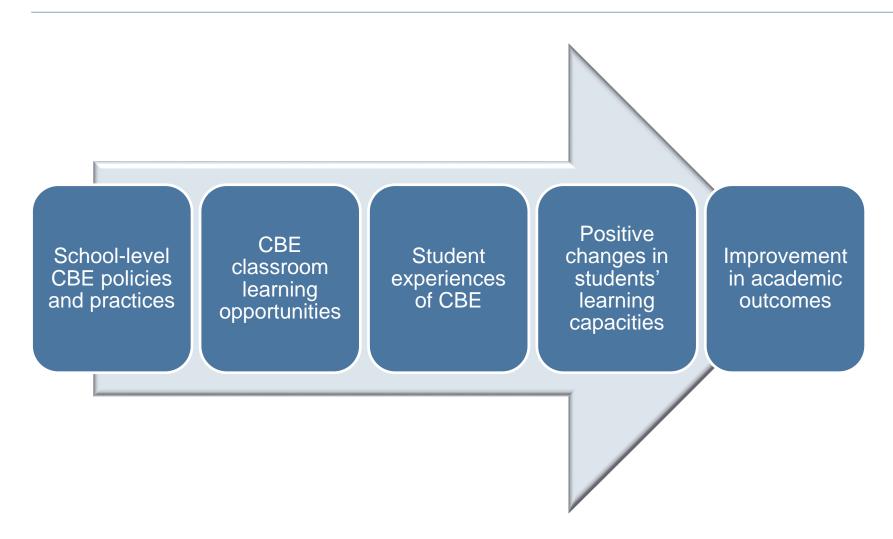
- 1. How do policies and practices differ between CBE and comparison schools?
- 2. What are students' experiences of CBE in the classroom?
- 3. What is the relationship between students' CBE experiences and their learning capacities?



What do we really mean by CBE?

1. Learning targets	are explicit, shared with students, and based on rigorous college and career readiness standards.	
2. Measurement of learning	is based on the mastery of specific learning targets rather than a student's level of participation, effort, or time in the classroom.	
3. Instructional approaches and supports	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.	
4. Assessment of learning	offers students flexibility and choice in when and how they show what they learned.	
5. Pacing and progression	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.	
6. When and where learning takes place	lets students learn and earn credit for activities that take place outside the school building and school day.	

How might CBE benefit students?



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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

Fall 2014	Spring 2015		
Student Baseline	Student Follow-Up		
Sample: Four CBE and four comparison schools	Sample: Four CBE and four comparison schools		
Student surveys: ninth-grade students' self-reported learning capacities: Mindsets and dispositions, Self-regulated learning, and Academic behaviors.	 Student surveys: ninth-grade students' Self-reported learning capacities and Reports of CBE experiences. 		
	Teachers and Administrators		
	Sample: All 18 CBE and comparison schools		
	Administrator survey		
	Core content teacher survey (Grades 9–12)		

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?

	In my math course,	Don't Agree	Agree a Little	Mostly Agree	Agree a Lot
a.	I understand exactly what I need to learn to pass and get credit.	0	0	0	0
b.	I know exactly what I am trying to learn when I work on a math assignment.	0	0	0	0
c.	I know ahead of time what knowledge and skills I will need to demonstrate on a math test or assessment.	0	0	0	0

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!

- schools.
- Substantial variation within
 Many teachers in comparison schools report implementing practices commonly associated with CBE.

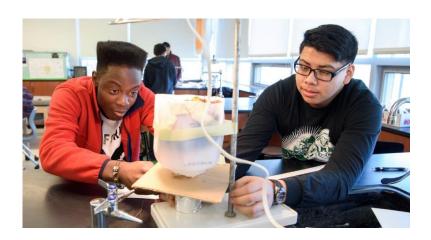


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Student Reports of Their CBE Experiences

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?



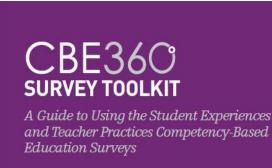
What were our takeaways?

- 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



August 2017

Wendy Surr Catherine Bitte

Lauren Clymer Olivia Briggs







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

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									
Feature Area	Student Survey Items	Teacher Survey Items ¹							
Student Autonomy and Decision Making	Course specific- [Item set. Use all items.] 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) In your math/English course, who decides a. Which topics you will learn each day in class? b. Which activities or coursework you do during class? c. What kinds of help/support you need in your math course? d. The due date for your coursework? e. How you will show what you learned (for example, whether you will take a test or do a project)? f. When you will take a final exam or assessment to show what you have learned in the course?	Course specific- [Item set. Use all items.] 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) In your course, who decides a. Which topics each student learns in class every day? b. Which activities or coursework each student does during class? c. What activities or coursework each student does outside of class or learning time (e.g., homework)? d. How fast or slow each student moves through the course content? e. The due date for each student's coursework? f. What kinds of help and support each student needs? 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.)? h. When each student will take a final exam or assessment?							

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?

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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

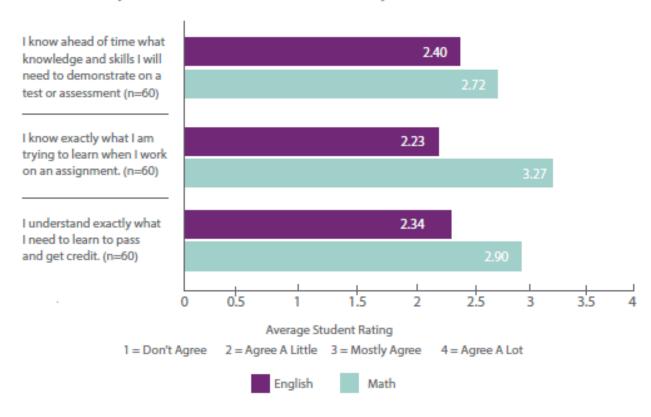
- Plan your data interpretation approach
- Engage stakeholders in interpreting survey findings
- Synthesize findings and identify target audiences with whom to share results
- Communicate (and use) your findings to improve CBE implementation

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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?



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Technical Appendix

Learning Targets

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

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,

	Never	Less Than Once per Month	At Least Once per Month	At Least Once per Week	Every Day or Every Class
I meet with another student to help each other with schoolwork.	\circ	\circ	\circ	\circ	•
I review and talk about another student's work.	\bigcirc	\circ	\circ	•	\bigcirc
I present my work to other students and adults/teachers.	\circ	\circ	•	0	\circ
I work with a group of students on a project or assignment.	\bigcirc	•	\circ	\circ	\bigcirc

Prev Next

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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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