



ALIGNING COMPETENCIES TO RIGOROUS STANDARDS FOR OFF-TRACK YOUTH

A CASE STUDY OF BOSTON DAY AND EVENING ACADEMY

DECEMBER 2012

By Rebecca E. Wolfe

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PATHWAYS THROUGH POSTSECONDARY



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INTRODUCTION

For over 17 years, Boston Day and Evening Academy has served a population of young people often left behind: those who are off track to high school graduation or who have dropped out altogether. Throughout its history, BDEA has used a **competency-based approach** as a way to accelerate student progress toward graduation and postsecondary success and foster deep learning and critical thinking.



Terms marked in **bold** are defined in the glossary on page 12.

Definitions describe the terms according to how BDEA uses them.

Through its competency-based approach, BDEA has tackled one of the toughest education conundrums of our time: how to recover low-skilled students two or more years off track to graduation, provide them a rich and rigorous education aligned with the Common Core State Standards, and graduate them quickly and college ready.

Increasingly, BDEA has brought the competencies it requires in line with Massachusetts' rigorous state standards, which now align to the Common Core. In spring 2011, with support from the Nellie Mae Education Foundation, BDEA began a formal, school-wide process to align its competencies to the Common Core as well, and then led a series of summer institutes for schools around the country serving similar populations. BDEA staff and nonprofit partners from Jobs for the Future (JFF), WriteBoston, and the Center for Collaborative Education (CCE) designed and launched the Responsive Education Alternatives Lab (REAL) and its summer institute to help schools create or refine their own competency-based platform aligned to high standards.¹

This report uses BDEA as a model to describe the process of aligning competency-based pathways for off-track youth with rigorous standards. In BDEA's case, that alignment is meshing its existing college and career ready competencies with the Common Core. In summer 2012, CompetencyWorks produced a paper and webinar describing the orientation and processes that innovative educators use when developing competencies.² BDEA was included as one of those innovators. This brief builds upon that discussion by further detailing how BDEA designs its competencies for struggling students. In addition to a narrative of the process, the brief contains a glossary of terms and numerous examples, tools, and resources to assist educators tackling this work for their schools.

Interactive Brief

When reading this document on your computer, all terms, tools, resources, endnotes, and more are live links. Click on them to access more information.



guide

JFF serves as a design and implementation partner for REAL and documented the alignment process. JFF partnered with BDEA because it is a "Back on Track to College" school that is intentionally preparing struggling young people for postsecondary education through enriched academics. BDEA is also increasingly building out its ability to provide students with a bridge to, and support into, their first year of postsecondary education.³ While this brief focuses on the translation of standards into competencies for Back on Track schools and programs, its insights are applicable to a wider population of youth and schools, as are the tools that BDEA has developed and used.

BOSTON DAY AND EVENING ACADEMY AND COMPETENCY-BASED EDUCATION FOR OFF-TRACK YOUTH

At BDEA, competency-based education is more than a grading or curricular system; it is a cultural, structural, and instructional mindset. BDEA is committed to ensuring that its formerly off-track and disconnected students not only earn a high school diploma, but that they graduate ready to succeed in postsecondary education. For example, passing the Massachusetts Comprehensive Assessment System (MCAS) state tests is a graduation requirement at BDEA. Thus, demonstrating proficiency via standardized testing is a necessary step for its students. But BDEA's competency-based approach recognizes that meeting standards alone is not sufficient. Accordingly, BDEA's unique model is designed to ensure that its traditionally underserved students gain the full range of knowledge, skills, and competencies they need to be college and career ready.

students always know exactly what they need to do to pass a course and eventually graduate.

BDEA determines students' progress through their demonstration of competencies each trimester on a variety of assessments, such as oral and written exams, portfolio presentations, and experiential projects. After demonstrating mastery of all competencies, students complete a capstone project and present it to a panel of faculty, administration, and community members.

Competency-based approaches can be effective with this population for a number of reasons. Increasingly, educators are recognizing the effectiveness of customizing education and linking it to individual interests and motivation to maximize learning potential.⁴ The individual tailoring and pacing of a competency-based curriculum is especially suited to the population of off-track youth, who are older and enter with lower skill levels and more varying credits than a traditional high school student.

From the students' perspective, the transparency of a competency-based system is transformative and empowering. As one student told Head of School Beatriz Zapater, "BDEA is better for me because it's not as easy to fail like in other schools. In my former school, I can miss one paper and be failing—here, it's not that easy to fail. The benchmarks give you a chance to revise and redo until you 'get it.'" In many cases, it is the first time in the students' academic career that they know exactly what they are learning, what they need to do to demonstrate mastery of the subject, how far they need to go to graduate, and how to take charge of their own progress.



Understanding Competency-based Education

See page 13 for a brief overview of competency-based education and to access additional related resources.

resource

BDEA's curriculum is comprised of over 300 **benchmarks** in humanities, math, science, and technology, all of which are organized into the major **competencies** that students must master in order to graduate. Entering students take a comprehensive assessment. Staff use the results and available transcript records to develop an online **Individual Learning Plan** (ILP) that records all the skills and content the student has mastered, and tracks which competencies he or she needs to develop. The student gets a paper-based copy that is used during progress check-ins with teachers and advisors. The ILP is the basis of a transparent system in which

A SNAPSHOT OF BOSTON DAY AND EVENING ACADEMY

History

Boston Day and Evening Academy was founded in 1995 as a Boston Public Schools Pilot School. Soon after, it became a Horace Mann Charter School, a district public school that has a state charter granting it certain autonomies accompanied by increased accountability. Throughout, it has been a leader in the use of competency-based assessment and experiential learning.

In its early years, BDEA, then called Downtown Evening Academy, was Boston's first diploma-granting evening public school. Today, it offers evening, day, and distance learning programs and is a unique, year-round alternative public school, helping students who are off track to graduation, over-age, or out of school earn a Boston Public Schools high school diploma.

The Students

BDEA serves approximately 370 16- to 22-year olds from all over Boston. Many students have had significant gaps or interruptions in their learning, especially in the core areas of literacy and numeracy, and come to BDEA with a history of hardship in school. Every BDEA student qualifies for free or reduced-price lunch, 10 percent are parents, and at any given time about 15 percent are homeless. BDEA meets students where they are in their education, preparing them to graduate ready for college and the workforce.

Significant Successes

- > For the past three years (2009, 2010, 2011), an average of 90 percent of students passed the tenth-grade MCAS in English language arts, even though 55 percent of students enter BDEA with less than eighth-grade reading skills.
- > For the same period, 80 percent of students passed the tenth-grade math MCAS, even though 63 percent entered with less than eighth-grade math skills (and 43 percent had lower than fifth-grade skills).
- > Of the 2011 graduates, 63 percent went on to two-year college programs, and 19 percent enrolled in four-year college programs.

BDEA'S COMPETENCY ALIGNMENT PROCESS

From its opening day, BDEA has been a competency-based school focused on providing underserved students with a rigorous education in a supportive environment. Over time, the school's definition of the competencies and their corresponding benchmarks has evolved, as has the level of coherence across the school regarding the understanding, measurement, and alignment to state standards of the competencies in all classrooms. In the early days, teachers had latitude over which of the state's standards they addressed. With experience, the school moved to the current, more coherent model that engages all teachers and instructional leaders in a step-by-step process of determining which standards they can and should cover and which to drop. Students now use the competencies continually as they track their own progress toward graduation and college readiness.

In addition to honing its procedures for designating and teaching competencies, BDEA has increasingly aligned its competencies with Massachusetts and now the Common Core State Standards. To ensure that its competency-based system aligns to the Common Core while meeting students' needs, the school has followed a process of several sequential and overlapping steps, beginning in early spring 2011 (see *table on page 5*).

1. Instructional leaders familiarize themselves with the Common Core State Standards for content and philosophy.
2. Administrators and department heads lead departmental and interdepartmental retreats to begin alignment.
3. Teachers and the director of instruction define, refine, and remove competencies.
4. Departments identify benchmarks for the competencies.⁵
5. Instructional leaders craft a scope and sequence for the competencies and benchmarks.

6. Department heads and instructional leaders do a full-staff roll out of new competencies and benchmarks.
7. Department heads and teachers create curricula and assessments to implement the new competencies and benchmarks.
8. Administrators and department heads perform ongoing review and revisions.

The process is still unfolding. For example, BDEA is currently engaged in modifying the scope and sequence of its courses, rolling them out to the full teaching staff, and creating new curricula and assessments for the new competencies. Staff and teachers also are continually reviewing, revising, and improving their curricula and assessments. This brief focuses on the first four steps: They are fundamental for schools seeking to meet rigorous standards while serving off-track youth.

Throughout, BDEA follows a transparent process for dealing with "sticky" issues that arise. This way, BDEA administrators ensure that they provide teachers an ongoing platform to surface concerns and questions with the implementation. The director of instruction devotes a significant portion of departmental meetings to the roll out of the standards-aligned competencies, wrestling with definitions, developing assessments, and sharing student work. On Fridays, classes are held only for half the day, enabling teachers to devote time to professional development and other ways to improve their instruction. In addition, department heads meet monthly to problem solve.

STEP 1. BUILD FAMILIARITY WITH THE COMMON CORE STATE STANDARDS' CONTENT AND PHILOSOPHY

The first step for BDEA in aligning its competencies to the Common Core was for department heads and lead teachers (the instructional leaders) to understand and buy in to the standards as a platform for college and career readiness.

BOSTON DAY AND EVENING ACADEMY'S PROCESS FOR ALIGNING COMPETENCY-BASED PATHWAYS TO THE COMMON CORE

	LATE SPRING/ SUMMER School Year One	FALL School Year Two	WINTER/ SPRING School Year Two	SUMMER School Year Two	FALL School Year Three
1. Build familiarity with the standards' content and philosophy	●				
2. Begin the alignment with departmental and interdepartmental retreats	●				
3. Define, refine, and remove competencies	●				
4. Identify benchmarks for the competencies	●	●			
5. Craft a scope and sequence	●	●	●		
6. Roll out new competencies and benchmarks		●			
7. Create curriculum and assessments		●	●	●	●
8. Perform ongoing review and revisions	●	●	●	●	●



Understanding the Common Core State Standards
Access a brief overview of the Common Core and a list of helpful websites on page 14.

resource

BDEA administrators had department heads take part in one of the training sessions held by the Massachusetts Department of Elementary and Secondary Education. Like many state education departments, DESE offered numerous opportunities to engage with the changes in the lead-up to the state's adoption of the Common Core and the 2014 alignment of the state's high-stakes exam, the MCAS, with it. The training gave the participants an understanding of the rationale behind the changes, a glimpse into their potential impact on BDEA students, and a grounding in the standards and the justification for the shift to the Common Core. In particular, BDEA leaders gained tools for helping their teachers understand that the Common Core had been developed by educators to help students

develop the analytical skills necessary to be college ready.

The department heads recognized how the Common Core aligned with BDEA's goals and philosophy. Director of Instruction Alison Hramiec also conveyed the intention to the staff that the Massachusetts Curriculum Frameworks (as the state's adaptation of the Common Core is known) would serve as a guide—not every school would teach every single standard. The BDEA staff still had to do the hard job of defining the right strands and appropriate reach for their students.

STEP 2. BEGIN THE ALIGNMENT WITH DEPARTMENTAL AND INTERDEPARTMENTAL RETREATS

Next came the time-consuming but necessary step of mapping BDEA's existing competencies to the Massachusetts Curriculum Frameworks. During a two-day retreat in May 2011, the director of

instruction, department heads from humanities and math, two to three teachers from each department, and coaches from WriteBoston and CCE painstakingly worked through the frameworks and BDEA's standards. Through a side-by-side comparison, the department teams identified gaps and places of alignment, and then began drafting the necessary changes.



resource

Retreat Agenda

View the BDEA Massachusetts Curriculum Frameworks Realignment Retreat Agenda from 2011 on page 16.

The retreat began with a full-group discussion of BDEA's mission and student population. Stepping back like this grounded the staff in the goals of the school and reminded participants of their students' challenges and needs. These preliminary discussions focused the staff on both the population they serve—students with low skills and behind in credits—and the high standards those students must achieve. For example, many high schools might be able to start ninth grade with the ninth-grade Common Core standards, but students entering BDEA often have fifth- or even fourth-grade math and literacy skills. Starting with ninth-grade standards would compound the frustration and failure BDEA's students have experienced in previous education settings.



tools

Student Population Considerations for Developing Competencies

Sample questions for staff in each department to answer about their student populations are on page 15.

Next, the whole group examined the strengths and weaknesses of the existing instructional platform and ILP. An observation from both English and math content areas was the need to add competencies from the fifth- to the eighth-grade level in the Massachusetts Frameworks. Teachers commended the teacher- and student-friendliness of the ILP's language in contrast to the state standards. The instructional leaders and teachers also found that they needed to break down the broad concepts of the standards further, since they found so many skills or content embedded in each of them. Staff members reaffirmed their experience that

breaking standards into smaller steps builds student knowledge and academic confidence.

The final conversation before the group broke up by department entailed a discussion of the Common Core, the particulars of the Massachusetts Frameworks, and an opportunity for some of the instructional leaders to engage with their colleagues around the information they had learned from the DESE sessions. Having fellow teachers teach one another using their new expertise was a powerful way to share the rationale for the changes and expand staff buy-in to them.

With this common understanding, the participants divided into groups organized by department. Each educator spent some time on his or her own, doing a side-by-side comparison of BDEA's competencies in their subject area with the corresponding areas of the Massachusetts Frameworks. They focused on differences, misalignments, and gaps. Then each department head led a group discussion, beginning with general reactions to the frameworks, followed by a detailed examination of each discrepancy between the standards and BDEA competencies and benchmarks, culminating in tough decisions on how to handle them.

On the second day of the retreat, everyone came together to discuss high-level issues with which the departmental groups had wrestled. The humanities department reported that most of the BDEA competencies aligned but that the benchmarks needed adjusting. Primarily, they felt that the Massachusetts Frameworks standards for grades 11 and 12 incorporated more critical thinking skills. They felt confident they could add to the BDEA ILP to make these align better. The math department found a more significant gap between the frameworks' expectations of geometry and algebra levels and what they were offering and succeeding at delivering with students.

STEP 3. DEFINE, REFINE, AND REMOVE COMPETENCIES

Never before had the BDEA staff had to make such clear, reasoned cases for the tough decisions on which standards to prioritize. When confronted with

gaps between what they were teaching and the Massachusetts Frameworks, the departments dug in with deep conversations on whether to attempt to bridge those gaps and how they might do so. In the weeks after the retreat, the departments devoted their regular meetings to finishing the painstaking march through the standards. Each department created a means to document the differences it found and suggestions for ways to align.

Humanities

Because BDEA has at most three years with its students—and two years on average—the humanities ILP does not cover all the content that a traditional school would. A long-time member of the Coalition of Essential Schools, BDEA practices one of the CES Common Principles, “less is more” (or “depth versus breadth”).⁶ For example, a student might read just one book during an 11-week module, with a focus on developing basic skills and deep understanding. Similarly, BDEA history teachers reach for higher-order thinking among the students, while not covering a significant amount of history content.

In fact, by aligning the competencies, the humanities teachers realized they needed to streamline their content coverage so that students could stretch even further in their critical thinking and in mastering higher-level material. Over the course of the year, the staff built in more content to enable students to reach higher-level eleventh- and twelfth-grade standards.

Math

The Common Core not only takes students all the way through Algebra II, but also asks them to prove, justify, and explain math concepts. Without additional staff and time with students, BDEA staff recognized they could not bring most of the students to that level. Too many BDEA students enter with third- through sixth-grade math skills; their deficits are simply too great to overcome in the time BDEA has with them.

To inform the math department’s response to this issue, Hramiec organized a series of conversations with non-BDEA math educators in Boston and

attended math conferences focused on identifying the essential skills for getting students like BDEA’s back on track. After much deliberation, BDEA’s math educators refined their competencies to combine essential content and the Standards for Mathematical Practice (SMP), the math habits of mind as defined by the Common Core. They determined that all BDEA students should be able to demonstrate the ability to solve open-ended problems and apply what they are learning to the real world and unique contexts.

With this construct of SMP as the end goal, the math teachers felt they could ensure that their students would leave BDEA with some mathematics fluency—that they could move flexibly from fractions to decimals to percentages; could persist through math problems; had a basic number sense and familiarity with algebra and geometry; and possessed a statistical and graphing knowledge.

In looking at the side-by-side comparisons of BDEA competencies and the Massachusetts Frameworks, BDEA math teachers decided to include standards from the Common Core elementary level in their competencies. Students enter BDEA with such significant gaps in their knowledge that instructors often teach basic number sense or elementary fractions. There needed to be a corresponding competency for all material covered at BDEA and expected for graduation.

This relationship of material and credit is important: Students come to see the value of their work through achieving benchmarks. This incremental achievement and forward momentum is a critical feature in building academic confidence for this population.

When BDEA lost one math teacher due to budget constraints, school leaders made a difficult decision: not to move ahead with two new math **modules** the school had designed. These had been created to reach a bit farther with the handful of students at the higher end of the skills spectrum. Instead, the math department beefed up its support and connections for dual enrollment, strengthening partnerships with Bunker Hill Community College and Benjamin Franklin Institute. The partnerships

enable BDEA to offer a full complement of courses for students who enter with stronger math skills.



resource

Mathematics Side-by-side Comparison

View a sample comparison between Massachusetts Curriculum Frameworks mathematics standards and BDEA's ILP at the start of the alignment on page 17.

STEP 4. IDENTIFY BENCHMARKS FOR THE COMPETENCIES

BDEA's instructional leaders originally planned for teachers and administrators to focus intensively over the spring and summer of 2011 on defining the high-level competencies, and then have them bring the revised competencies to the full staff for discussions of the implications. However, retreat participants quickly realized that in reality the two steps of defining competencies and identifying benchmarks for them flow together. In fact, the humanities department left the retreat with a first draft of the new ILP in hand. Although it can be useful to think of the process sequentially, in practice conversations comparing the competencies naturally integrate implications for the benchmarks.

After the initial retreat and conversations, the director of instruction and department heads used department meetings throughout the year to examine other benchmarks, adding or subtracting as necessary. The departments also rearranged under which competencies the benchmarks would be taught.



tools

Developing Competencies and Benchmarks

See page 18 for BDEA's step-by-step guide to developing competencies and benchmarks that align to standards.

In order to be both thoughtful about the process and not overwhelm teachers with new demands in the midst of a school year, BDEA designed a multiyear phase-in of the aligned competencies that combines steps 5 through 7.

STEP 5. CRAFT A SCOPE AND SEQUENCE FOR THE COMPETENCIES AND BENCHMARKS

STEP 6. ROLL OUT NEW COMPETENCIES AND BENCHMARKS

STEP 7. CREATE CURRICULUM AND ASSESSMENTS

With the newly defined and adopted competencies and benchmarks in hand, the staff developed a **scope and sequence** for the competencies, and linked that to course modules. To engage all staff members with the changes and ensure they were comfortable and versed in them, the instructional leaders, Hramiec, and department heads continued to devote significant portions of staff development time to discussing the changes and implications for teaching and learning. Discussions with staff on scope and sequence naturally lend themselves to reexaminations of the curriculum and assessments. This step offered another opportunity to consider adjustments to ensure that students would get the skills they need in their relatively brief time at BDEA.

For example, the humanities leaders decided they needed to adjust the department's scope and sequence to incorporate additional critical thinking skills; during the alignment process, they had identified a need to work on this with their students more. With the decision to devote more of students' time to reading, the teachers then sought to determine where to fit that time into the scope and sequence of coursework.

The humanities teachers sought to make sure the reading level of the texts was both appropriate and at a higher level than it was previously. Hramiec asked teachers to review all their texts as part of the alignment process. Although they found a need for only a few adjustments, the activity raised teachers' consciousness about whether they had the right grade and ability levels in mind for challenging their students.

Zapater, Hramiec, and the other BDEA leaders rely on the classroom teachers to make instructional decisions like these, and to tell the administrators what they need to do to support that work. BDEA

leaders believe that those closest to the work should help make key decisions. The development and adoption of the newly aligned standards is no different. After the first steps of the collaborative process concluded, the department heads and Hramiec rolled out the changes in smaller meetings, giving all teachers the opportunity to engage with the new competencies and their scope and sequence, and to make decisions on what the changes would mean for the classrooms and instruction. In the humanities example, the shift to incorporating more critical thinking has implications for the teachers' choices of texts. Humanities teachers devote time over the course of the year to deciding on new texts, developing lesson plans, looking at student work, discussing the level of rigor and quality students must hit, and developing appropriate assessment rubrics.

Over the course of the 2011-12 school year, teachers continued to reshape their curricula and assessments to match adjustments to the competencies and benchmarks. In 2012-13, they are continuing this process, with a focus on the assessments. They are asking questions such as: How should students demonstrate the new benchmark? What does it mean for them to apply and demonstrate critical thinking skills?

The hardest part of creating assessments, says Hramiec, is clearly defining how to measure the benchmark. Department meetings provide the venue for ensuring that measurements fit the assessments. Teachers present how they defined a measurement, show an example of student work, and ask colleagues to assess whether they feel the student mastered the benchmark. Through these exchanges, teachers challenge one another to maintain rigor, reliability, and consistency in their assessment procedures.

STEP 8. PERFORM ONGOING REVIEW AND REVISIONS

As is probably evident, BDEA engages in a constant feedback loop throughout each step of this process. The staff and teachers are in frequent and transparent communication about the changes. They recognize that instituting new assessments to measure new benchmarks often leads to an iterative process in which a benchmark needs to be refined.

Ongoing Review and Revision: Humanities

View the frameworks' humanities standards alongside BDEA's ongoing reviews of their own competencies and benchmarks on page 20.



Despite the ongoing nature of these steps, however, BDEA does not foresee major changes to the ILP for several years once the process is complete at the end of the 2012-13 school year.

LESSONS FOR EDUCATORS

BDEA's competency-alignment process offers a number of lessons for educators about translating rigorous standards for lower-skilled and off-track student populations.

Teachers must be involved at every step in the alignment process. By engaging and immersing multiple levels of staff in the process and devoting significant staff time to the development, BDEA ensured that the competencies would uphold their school's mission and be instituted with coherence and fidelity across the school.

Each school must define a level of rigor that is both appropriate and high for its particular population—and it must do so before turning to the challenge of ensuring that students will pass state tests. Keeping the emphasis on quality teaching and learning, rather than standardized tests, meets the same goals and is more galvanizing for students and teachers.

Schools should understand district and state constraints on what must be taught versus what is at the school's discretion. Although no school in the country is expected to teach all the standards, each district, charter, and state context impacts what a school must deliver. As a Horace Mann Charter School, BDEA had a clear and informed picture of what standards they were required to teach before undertaking an alignment process.

Maximize partnerships to offer a broader array of content. Back on Track schools are typically smaller with fewer staff members. Schools can still offer non-core courses and resources via strategic partnerships with community colleges or other local schools.

Schools serving over-age, undercredited students need to include the mastery of some middle and even elementary school competencies, particularly in mathematics. Of all the lessons learned, the most challenging and concerning for BDEA has been the significant gaps in students' mathematics knowledge and how to best handle those gaps.

This lesson has important implications for the field. Back on Track schools strive to provide an enriched curriculum that ensures that formerly off-track students graduate college and career ready. BDEA teachers do not want to sacrifice rigor, yet they have had to make tough decisions to prioritize reengaging students by meeting them where they are. The alternative would be to place unreasonable demands on students to progress through as much as five or six years of math in perhaps two years.

Some students have told BDEA administrators that they do not mind taking remedial math classes once they reach college. These students have found that the classes help them develop resiliency and confidence in their basic math skills, as well as additional non-cognitive skills needed to persist in higher-order math courses. However, BDEA does not consider this an ideal solution, nor does it plan to remain satisfied with it.⁷ The school intends to keep working to raise the math ability of its graduates. The teachers appreciate that the Massachusetts Frameworks and the Standards for Mathematical Practice place critical thinking of a mathematician at the center and will continue to reach for those standards.

This issue is not unique to BDEA, nor can BDEA solve it in isolation. As districts move toward adopting the Common Core, they will confront the challenge of how to support schools serving over-age, undercredited students, where students at a fifth-grade mathematics level may sit next to students at the tenth- or eleventh-grade level. Just as important, educators must recognize that off-track youth can accelerate into postsecondary education, and they must be committed to providing the structures, supports, and education that help their students thrive. Competency-based models enable the kind of differentiation these students need, but the approach is not a panacea. It takes a concerted, coordinated, and vigilant effort on the part of school leaders and teachers to implement it in a manner that maintains instructional excellence. BDEA's experience offers one possible roadmap to navigating this new terrain.

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GLOSSARY OF BDEA KEY TERMS

Benchmarks: Discrete and measurable learning objectives by which a student demonstrates competency; designed to build academic confidence, strengthen student skills, and provide opportunities for advanced work.

Competent: Able to demonstrate understanding and application of specific skills and content independently, multiple times, and using the correct vocabulary.

Competency: The enduring understanding of content and skill a student needs in a specific discipline. Each competency is relevant and necessary for future learning.

Competency-based Education/Approaches/

Pathways: Students are required to demonstrate mastery of a comprehensive list of competencies to fulfill local graduation requirements.

Competencies are aligned with state standards but include the enduring understandings relevant to school mission and student body. Students advance based on demonstrating mastery of benchmarks and competencies. Students are rated as Highly Competent, Competent, or Not Yet for each competency and benchmark. A system of assessments (pre and post) and diagnostics properly place students in courses based on student skill. For more information, see page 13.

Individual Learning Plan: The ILP contains the competencies and benchmarks the student needs to graduate. Each BDEA student receives an ILP created by his or her advisor and the student together and monitored by the advisor on a regular basis. As a student attains benchmarks, the teachers signs off on them, giving the student frequent and transparent evidence of his or her progress towards graduation.

Modules: Trimester-long academic “courses” at BDEA that embed a distinct set of competencies and benchmarks.

Scope and Sequence: The breadth and depth of a specific curriculum. For instance, the scope is how much a subject is taught over the course of a trimester or year. The sequence is the order in which the lessons are taught.

More on how BDEA defines and uses key terms can be found at CompetencyWorks’ “Boston Day and Evening Academy: Where Competency Education Is Good Teaching Practice”: <http://bit.ly/TXEXav>

UNDERSTANDING COMPETENCY-BASED EDUCATION

WHAT IS COMPETENCY-BASED EDUCATION?

Competency-based education is an approach or model in which students advance based upon demonstration of skills and content as opposed to progressing because of grade levels or seat time (i.e., the amount of time students are required to take a course).

Competency-based education builds off standards reform by using rapid, differentiated instruction, as well as a range of assessment options, to allow students to demonstrate what they have learned.

The following working definition from *When Success is the Only Option: Designing Competency-based Pathways for Next Generation Learning* (2010) provides elements of a high-quality competency-based approach:

- > Students advance upon mastery.
- > Explicit and measurable learning objectives empower students.
- > Assessment is meaningful and a positive learning experience for students.
- > Students receive rapid, differentiated support.
- > Learning outcomes emphasize application and creation of knowledge.

BDEA is an example of a competency-based school that uses neither Carnegie units (seat time based accounting), nor traditional end-of-course summative grading (a single A, B, C, D, F), nor traditional grade levels (ninth, tenth, eleventh, twelfth) to measure success and progress. Competency-based education can be an effective method of accelerating learning for students who are off track from graduating by allowing them to spend time on the areas where they need the most work and not having to repeat learning concepts they have already mastered.

SOME SOURCES FOR ADDITIONAL INFORMATION AND TOOLS

CompetencyWorks, <http://www.competencyworks.org>, <http://www.competencyworks.org/resources/briefing-papers>

Blogs, resources, briefing papers, and a wiki on competency-based education for innovators and early adopters

Maine Department of Education Case Studies, <http://maine.gov/doe/cbp/case-studies/index.html>

Case studies that describe the steps three school districts took to implement a proficiency-based, learner-centered instructional system

Making Mastery Work: A Close-Up View of Competency Education, <http://www.nmefoundation.org/global/featured-research/homepage/making-mastery-work-a-close-up-view-of-competency>

Competency-Based Schools Embrace Digital Learning, <http://www.edweek.org/dd/articles/2012/10/17/01competency.h06.html>

Education Week profile of several competency-based schools, including BDEA, with additional links and related articles

UNDERSTANDING THE COMMON CORE STATE STANDARDS

The Common Core State Standards Initiative is a state-led effort to establish a shared set of educational standards for English/language arts and mathematics for K-12 grade levels. Adoption of the standards by states is voluntary; to date, 45 states and three U.S. territories have adopted them.

The Common Core State Standards were developed with input from teachers, administrators, content experts, state education leaders, and the general public. They are designed to create fewer, higher, and clearer academic standards that emphasize the application of knowledge through higher-order skills. They are intended to level the playing field (or lessen educational skill disparities) by upholding rigorous standards for all students. The Common Core is based on current education research and evidence, informed by state standards across the United States, and benchmarked to international standards to ensure that, in an increasingly global society, students are graduating ready for the workforce or college.

SOURCES: Common Core State Standards Initiative, "Frequently Asked Question," www.corestandards.org, accessed on June 26, 2012.

National Association of State Boards of Education "Common Core State Standards," <http://nasbe.org/project/common-core-state-standards-ccss/>, accessed on June 26, 2012

SOME SOURCES FOR ADDITIONAL INFORMATION AND TOOLS

Common Core State Standards Initiative, www.corestandards.org

Frequently Asked Questions

Common Core Standards Myth vs. Fact, <http://www.corestandards.org/about-the-standards/myths-vs-facts>

National Association of State Boards of Education, Common Core State Standards, <http://nasbe.org/project/common-core-state-standards-ccss>

Common Core Implementation Workbook, <http://www.achieve.org/ImplementingCommonCore>

Library of Congress, <http://www.loc.gov/teachers/>

Lesson plans and more that meet Common Core State Standards

Edutopia, Resources for Understanding the Common Core, <http://www.edutopia.org/common-core-state-standards-resources>

A comprehensive guide to available resources, listed by source site/organization

The Hunt Institute YouTube Channel, <http://www.youtube.com/user/TheHuntInstitute>

Overviews of the core standards in English and Spanish

P21 Common Core Toolkit, <http://www.p21.org/storage/documents/P21CommonCoreToolkit.pdf>

Sample lessons and assignments, along with which core standards each covers

STUDENT POPULATION CONSIDERATIONS FOR DEVELOPING COMPETENCIES

BDEA staff found it important to revisit the school's mission and student population before determining the right competencies for their population.

Rather than ask staff to memorize the mission, the director of instruction led an open discussion covering some of the following questions about their students.

ALL DEPARTMENTS TOGETHER:

- > Who are our students?
 - » What is the range of skill levels among our entering students? (What percentage comes in below sixth-grade level in reading and math? What percentage enters at the seventh- or eighth-grade levels? What percentage enters with high school-level skills?)
 - » What are their particular social and emotional challenges? What are their academic, social, and emotional strengths?
 - » What kinds of special education or other special needs do they have?
 - » What percentage of English language learners do we have?
 - » What are the dominant populations at our school beyond what the demographic numbers tell us (e.g., neighborhood, extracurricular activities, social identifications)?
- > What are our general college-ready and career-ready goals and expectations for our students? What do we expect they will be able to accomplish when they graduate from our school?
- > What do we want students to know and be able to do when they graduate from our school? What skills, content, and habits of mind do we want them to leave with?
- > What kinds of instructional strategy have worked well for our population?
- > Does our school have a theme (e.g., an arts school, a STEM school)? How does the theme impact our curriculum?

BY DEPARTMENT:

- > What are our students' particular strengths and weakness in reading, math, etc.?
- > What essential skills and knowledge do we want all students to master and demonstrate in reading, math, etc.?

RETREAT AGENDA

BOSTON DAY AND EVENING ACADEMY MASSACHUSETTS CURRICULUM FRAMEWORKS REALIGNMENT RETREAT, MAY 12-13, 2011

Meeting Objectives

- > Review the Massachusetts Common Core Standards (MACC) and align with BDEA ILP for math and Humanities (Day One)
- > Determine what is different and make necessary revisions for departments to review (Day Two)

DAY ONE

I. Introduction (whole group)

Remind ourselves of our mission, our students, and that we have lots of experience knowing what works! (Share out: define these three components)

- a. Mission of BDEA
- b. Who are BDEA students
- c. What do we know works well with ILP?

II. Introduce MACC: Become familiar with Massachusetts Common Core Standards (whole group)

- a. MACC: What we know
- b. The Massachusetts Common Core Standards defined

III. Departmental Alignment: Humanities & Math (by department)

- a. General Reactions to the MACC
- b. Coding: doing the line-by-line crosswalk of standards and our competencies
- c. Ideas/Action steps

DAY TWO

I. General Debrief: Discoveries made, realizations, next steps, insights, process comments

- a. Relationships to BDEA's Habits of mind
- b. Relationship to Capstone & seminar
- c. Considerations for orienting new BDEA teachers

II. Math Debrief

III. Humanities Debrief

IV. Next Steps

MATHEMATICS SIDE-BY-SIDE COMPARISONS

MASSACHUSETTS CURRICULUM FRAMEWORKS	WHERE STANDARD IS COVERED IN BDEA ILP	WHAT'S MISSING AND HOW IT MIGHT BE HANDLED
MATHEMATICS SIDE-BY-SIDE COMPARISONS		
<p>Solve equations and inequalities in one variable.</p> <p>3. Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.</p> <p>MA.3a. Solve linear equations and inequalities in one variable involving absolute value.</p> <p>4. Solve quadratic equations in one variable.</p> <p>a. Use the method of completing the square to transform any quadratic equation in x into an equation of the form $(x - p)^2 = q$ that has the same solutions. Derive the quadratic formula from this form.</p> <p>b. Solve quadratic equations by inspection (e.g., for $x^2 = 49$), taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions⁸ and write them as $a \pm bi$ for real numbers a and b.</p>	<p>Alg1.1b,2a,2b</p> <p>Alg7.2c</p>	<p><i>We don't do absolute values equations.</i></p> <p><i>We don't ask students to explain enough</i></p>
FUNCTIONS: INTERPRETING FUNCTIONS		
<p>Understand the concept of a function and use function notation.</p> <p>1. Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If f is a function and x is an element of its domain, then $f(x)$ denotes the output of f corresponding to the input x. The graph of f is the graph of the equation $y = f(x)$.</p> <p>2. Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.</p> <p>3. Recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers. For example, the Fibonacci sequence is defined recursively by $f(0) = f(1) = 1$, $f(n+1) = f(n) + f(n-1)$ for $n \geq 1$.</p>	<p>Not written in our benchmarks</p>	<p><i>Some use it in AlgE</i></p> <p><i>We might add AlgF- but would have scaffold earlier</i></p>

DEVELOPING COMPETENCIES AND BENCHMARKS: A PROTOCOL

PART I: USE STANDARDS TO IDENTIFY COMPETENCIES AND BENCHMARKS

1. Review the standards that apply to your subject area (Common Core ELA Anchor Standards, Common Core Standards for Mathematical Content, state Science Standards, etc.). These will form the foundation of your Competencies.
2. Identify the skills and knowledge your students will need to develop to master each anchor standard. These will be your Benchmarks.
3. Put each set of Benchmarks in the order students will need to develop them to master the Competency.
4. Record each Competency and its accompanying Benchmarks, in order, into an Excel spreadsheet formatted as follows.

TEMPLATE

COMPETENCY: THE OVERALL CONTENT AND SKILLS A STUDENT NEEDS IN A SPECIFIC DISCIPLINE TO MASTER	
	Benchmarks:
	The building block skills students need to acquire and demonstrate to master the competency
	Numbered in the order in which a student would most likely develop the skills

PART II: EVALUATE COMPETENCIES/BENCHMARKS TO FIT SCHOOL MISSION

1. Review your Benchmarks. Given the needs of your student body, should any Benchmarks be elevated to Competencies?

EXAMPLE

ORAL COMMUNICATION 1: PRACTICE EFFECTIVE PRESENTATION SKILLS	
1a	Effectively organizes and prepares for presentation
2a	Understands and employs the guidelines for a polished and engaged presentation (i.e., eye contact, volume, posture, visuals, fielding questions)

2. Consider the skills students bring to your school. Are there lower-level skills they will need to develop in order to master your Competencies? If so, should these skills be Competencies or Benchmarks, or will you have another mechanism for addressing them (such as basic skills modules)?
3. Look at the grade-level expectations for the Common Core. Do you need to create Competencies or Benchmarks at a higher skill level to make sure your students are meeting these expectations?
4. Make sure the language of your Competencies and Benchmarks is clear for both teachers and students. Edit where necessary.
5. Look at your Competencies and Benchmarks as a whole and evaluate their feasibility. Given how long students spend in your program, can they realistically complete the entire list? If necessary, prioritize essential skills and eliminate Competencies and/or Benchmarks (see *Part III.2*).
 - » When deciding whether to eliminate a Competency or Benchmark, ask whether students can get to the next level of understanding without that skill or knowledge.
 - » Sometimes it will be more effective to eliminate larger areas of knowledge (as BDEA did in Science and History) rather than specific skills.

PART III: ALIGN COMPETENCIES/BENCHMARKS WITH STATE ASSESSMENTS

1. Analyze state assessments for past several years to answer the following questions:
 - » Which categories of the state standards appear most frequently?
 - » How well do your students do in each category?
2. Use this data to help prioritize your Competencies and Benchmarks (see *Part II.5*).
3. Review student assessment data yearly. Results in specific categories will help you identify where you need to improve your instructional practice, modify Benchmarks, etc.

BDEA ANALYSIS	REVISED BDEA MATH COMPETENCY OF STATE ASSESSMENT
<p>Mean, median, mode, and range are not part of the grades 9-12 Common Core Standards for Mathematical Content, but they do appear on the MCAS; our students were failing these questions.</p> <p>The MCAS frequently asks about changes to data sets.</p>	<p>Number Sense 4: Collect, organize, display, describe and analyze data</p> <p>4.1a. Calculate mean, median, mode and range, etc.</p> <p>4.2e Describe effect of additions, deletions, or other changes to a set of data</p>

PART IV: EVALUATE COMPETENCIES/BENCHMARKS FOR INCLUSION OF 21ST CENTURY SKILLS AND HABITS OF MIND

If your school uses 21st Century Skills and Habits of Mind, make sure they are reflected in your Competencies and Benchmarks.

1. Make sure your Competencies include 21st Century Skills: Communication, Collaboration, Creativity and Critical Thinking.

COMMON CORE ELA ANCHOR STANDARD	BDEA HUMANITIES COMPETENCY TRANSLATION
<p>Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development and style are appropriate to task, purpose and audience.</p>	<p>Oral Communication 1: Practice effective presentation skills.</p> <p>1a. Effectively organizes and prepares for presentation</p> <p>2a. Understands and employs the guidelines for a polished and engaged presentation (i.e., eye contact, volume, posture, visuals, fielding questions)</p>

2. Edit Competencies and Benchmarks to include Habits of Mind (Reflections, Evidence, Perspectives, Connections, Possibilities, Relevance). This can also help make the language of your Competencies and Benchmarks student friendly.

MASSACHUSETTS BIOLOGY STATE STANDARDS	BDEA BIOLOGY BENCHMARKS TRANSLATION
<p>Recognize that the body's systems interact to maintain homeostasis. Describe the basic function of a physiological feedback loop.</p>	<p>12. Explain the relevance of homeostasis in a human body system.</p>
<p>Identify the reactants, products, and basic purposes of photosynthesis and cellular respiration. Explain the interrelated nature of photosynthesis and cellular respiration in the cells of photosynthetic organisms.</p>	<p>4. Explain the connection between photosynthesis and cellular respiration and describe its relevance.</p>

3. Keep in mind:
 - » Not all 21st Century Skills and Habits of Mind will be part of your Competencies and Benchmarks. Some will be scaffolded into student learning in the form of assessments, instructional practices, rubrics, etc.
 - » Behavior practices such as completing homework, being organized, and setting goals are not academic competencies required for graduation and need to be instilled in other ways such as advisory, portfolios, etc.

ONGOING REVIEW AND REVISIONS: HUMANITIES

Even once the new competencies were instituted, the BDEA staff continues to discuss the rigor of their ILP, as exemplified in the meeting notes below.

SUBSECTION: INTEGRATION OF KNOWLEDGE AND IDEAS

ANCHOR STANDARDS	BDEA COMPETENCY/BENCHMARK
<p>8. Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence. <i>(Informational Texts only)</i></p>	<p>Oral Communication 3: Practice the habits of good oral communication</p> <p>3a. Evaluates a speaker's point of view, reasoning, and use of evidence and rhetoric.</p> <p><i>NB: this seems VERY thin—do we have benchmarks that explicitly teach students to read for argument and reasoning?</i></p>
<p>8a. Analyze the meaning of literary texts by drawing on knowledge of literary concepts and genres. <i>(Literature Texts only)</i></p>	<p>Rlit3: Identify and analyze different literary elements and genres.</p> <p>1a. Identifies at least three different literary forms.</p> <p>1b. Identifies and understands the basic literary elements of a text (plot, setting, character, conflict, mood, tone).</p> <p>2a. Identifies the characteristics of at least three genres.</p> <p>2b. Identifies themes and analyzes their development over the course of a text.</p> <p>2c. Uses textual evidence to identify and analyze figurative language and/or other higher-level literary devices.</p> <p>3c. Identifies and analyzes the connection of the text's theme(s) to an essential question.</p>

SUBSECTION: PRESENTATION OF KNOWLEDGE AND IDEAS

ANCHOR STANDARDS	BDEA COMPETENCY/BENCHMARK
<p>5. Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.</p>	<p>Res5: Demonstrate visual and media literacy</p> <p>2b. Analyzes the effect of creative choices in diverse media.</p> <p>3a. Gathers and integrates information from diverse media and formats into their own work.</p> <p>3b. Makes strategic use of digital media and visual displays of data to express information and ideas.</p>
<p>6. Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.</p>	<p><i>Not sure what we've got that really matches this . . .</i></p>

ENDNOTES

¹ For more information on REAL, see: www.bacademy.org/responsive-education-alternatives-lab. For more information on WriteBoston, see: www.bostonredevelopmentauthority.org/writeboston. For more information on the Center for Collaborative Education, see: www.ccebos.org.

² See: Chris Sturgis. August 2012. *The Art and Science of Designing Competencies*. CompetencyWorks. Available at: <http://www.competencyworks.org/resources/briefing-papers>.

³ Through work with schools and programs like BDEA, Jobs for the Future has developed Back on Track to College, a school model that helps over-age and undercredited youth achieve their postsecondary ambitions. This model is based on JFF's Early College Designs, through which students take college courses as part of their high school experience. Back on Track models are the next generation of alternative schools and programs, designed to prepare off-track and out-of-school youth for college and career success. JFF has developed a Back on Track school design that incorporates three phases: Enriched Preparation, Postsecondary Bridging, and First-year Supports. Back on Track schools offer rich academic preparation and a clear path to college, supporting young people who have fallen off track from graduation or dropped out to reengage and achieve their postsecondary ambitions. See: <http://backontrackdesigns.org>.

⁴ See, for example, the Students at the Center series of papers, all available at www.studentsatthecenter.org. In particular, see: *Mind, Brain, and Education*, by Christina Hinton, Kurt W. Fischer, and Catherine Glennon; *Motivation, Engagement, and Student Voice*, by Eric Toshalis and Michael J. Nakkula; and *Curricular Opportunities in the Digital Age*, by David H. Rose and Jenna W. Gravel.

⁵ Steps 3 and 4 happened simultaneously for some departments and more sequentially for others.

⁶ For more information on the Coalition of Essential Schools, see: www.essentialschools.org.

⁷ And nationally, fewer than 25 percent of community college students in developmental education earn a degree or certificate within eight years of first enrolling. Thomas Bailey. 2009. "Rethinking Developmental Education in Community College." *CCRC Brief 40*. New York, NY: Community College Research Center, Teachers College, Columbia University.

⁸ It is sufficient in Algebra I to recognize when roots are not real; writing complex roots is included in Algebra II.



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