

Competency-Based Education

Task Force Final Report

Senate File 2284

12/9/2013



Iowa Department of Education

Grimes State Office Building
Des Moines, IA 50319-0146



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Senate File 2284

The Iowa Legislature established a Competency-Based Education Task Force in Senate File 2284 and provided the following charge:

The Department of Education shall appoint a task force to conduct a study regarding competency-based instruction, standards, and options and the integration of competency-based instruction with the Iowa core curriculum, and to develop related assessment models and professional development focused on competency-based instruction. At a minimum, the task force shall do all of the following:

- a. Redefine the Carnegie unit into competencies.
- b. Construct personal learning plans and templates.
- c. Develop student-centered accountability and assessment models.
- d. Empower learning through technology.
- e. Develop supports and professional development for educators to transition to a competency-based system.

The task force is required to submit a preliminary report that includes, but is not limited to, its findings and recommendations relating to "b", "d", and "e", by January 15, 2013.

The task force is also required to submit its plan, findings, models, and recommendations in a final report to the State Board of Education, the governor, and the General Assembly by November 15, 2013.

House File 215

In 2013, House File 215 added an additional expectation to the Competency-based Education Task Force agenda:

- f. Develop a draft strategic plan and proposed timeline for statewide implementation of competency-based learning for consideration by the general assembly.

Task Force Membership

Todd Abrahamson, Superintendent, Grinnell-Newburg Community School District, Grinnell

Linda Allen, President, Hawkeye Community College, Waterloo

Brad Buck, Director, Iowa Department of Education, Des Moines

Connie Buhr, Director of Institutional Research, Hawkeye Community College, Waterloo

Charity Campbell, Teacher of the Year (2012), Norwalk Community School District, Norwalk

John Carver, Superintendent, Howard-Winneshiek Community School District, Cresco

Chris Coffman, LEA Curriculum, Grinnell-Newburg Community School District, Grinnell

Shawn Cornally¹, Teacher, Cedar Rapids Community School District, Cedar Rapids

Joan Corbin, Board President, Pella Community School District, Pella

Lyn Countryman, Coordinator of Student Teaching, University of Northern Iowa,
Cedar Falls

Sandra Dop, Consultant, Iowa Department of Education, Des Moines

Jason Ellingson, Superintendent, Collins-Maxwell Community School District, Maxwell

Ron Fielder, Professor, University of Iowa, Swisher

Dirk Halupnik, Executive Director of Instruction, Linn-Mar Community School District, Marion

Jeff Herzberg, Administrator, Prairie Lakes AEA, Pocahontas

Liz Hollingworth, Assistant Professor, University of Iowa, Iowa City

Pam Kirsch, Dropout Prevention Specialist, Davenport Community Schools, Davenport

Valorie J. Kruse, Member, State Board of Education, Sioux City

Susan Lagos-Lavenz, Associate Dean, University of Iowa, Iowa City

Nancy Movall, AEA PD Online, K12 Online Learning Specialist, Johnston

Allan Nelson, Superintendent, Clayton Ridge Community School District, Guttenberg

Dana Schon, Professional Learning Director, School Administrators of Iowa, Clive

Jen Sigrist, Director of Teaching & Learning, Van Meter Community School District, Van Meter

Elliott G. Smith, Executive Director, Iowa Business Council, Des Moines

Andrea Stewart, Teacher, Muscatine Community Schools, Muscatine

Deanna M. Stoube, Assistant Director for the School of Education, St. Ambrose University,
Davenport

Cindy Swanson, Teaching & Learning Specialist, Iowa State Education Association, Des Moines

David Tilly, Deputy Director and Administrator, Division of Learning & Results, Iowa Department
of Education, Des Moines

Matt Townsley, Director Instruction and Technology, Solon Community School District, Solon

Bridgette Wagoner, Director of Educational Services, Waverly-Shell Rock Community School
District, Waverly

Susan Walkup, Consultant, Iowa Department of Education, Des Moines

Kari Webb², NW Iowa STEM Regional Manager, Iowa Lake Community College, Estherville

Todd Wessels, Director of Technology, Curriculum, Personnel, Holy Family Catholic Schools

¹Teacher Math/Science, Solon High School, Solon at time of appointment

²Academic Dean at Spirit Lake Community Schools at time of appointment.

Non-Member Participants

The following were invited to attend the task force meetings to add particular, needed expertise to the conversation:

Mary Delagardelle, Assistant Administrator, Division of Learning & Results, Iowa Department of Education, Des Moines

Meredith Dohmen, School Counselor, West Des Moines Community School District, West Des Moines

Duane Magee, Board of Educational Examiners, Des Moines

Nancy McIntire, Coordinator, AEA 9, Bettendorf

Kevin Range, Principal, Spirit Lake High School, Spirit Lake

Rhonda Sheeley, Director of Instructional Services, Keystone AEA, Elkader

Andrew Wermes, Consultant, Iowa Department of Education, Des Moines

Shane Williams, Director of Elementary Innovation & Instruction and Technology, Muscatine Community School District, Muscatine

Lisa Fry Wilson, Programs/Services Administrator, Grant Wood AEA, Cedar Rapids

2012-2013 Meeting Schedule

Date	City	Facility	Time
July 30, 2012	Clive	School Administrators of Iowa	9:30-3:00
November 13, 2012	Clive	School Administrators of Iowa	8:30-4:00
February 14, 2013	Clive	School Administrators of Iowa	8:30-4:00
March 12, 2013	Clive	School Administrators of Iowa	8:30-4:00
May 14, 2013	Clive	School Administrators of Iowa	8:30-4:00
July 11, 2013	Clive	School Administrators of Iowa	9:00-3:30
September 18, 2013	Clive	School Administrators of Iowa	9:00-3:30

Introduction

What we have been doing in education is not working for many of our students, forcing us to admit that good enough is no longer good enough. We must redesign the way education is delivered in order to give all Iowa students the foundation they will need to thrive.

As the cohort of students who graduated from Iowa schools in 2012 walked the stage, they were missing 3,652 of their peers who had started high school with them four years earlier. Yes, we have always lost a few, but the stakes are much higher for those students now. Projections for students who do not graduate today are bleak. A 2011 Harvard School of Education report warns that they are “far more likely to be unemployed and/or to live in poverty. Socially, male dropouts are far more likely to end up in prison, while female dropouts give birth to a disproportionate share of babies born out-of-wedlock” (p. 34).

Not only must our students graduate, they must be prepared to succeed at postsecondary opportunities. The key is *prepared to succeed*. Since the mid-1970s, the percentage of students going directly from high school to community college has increased by 50 percent and the percentage going directly to four-year institutions has increased by 25 percent. However, nearly 40 percent need remedial coursework indicating that they may enroll, but are not ready for postsecondary challenges (Conley 2014). Conley (2014) calls this the “new challenge” for our schools because they “were never designed to prepare the vast majority of students to be ready for postsecondary success.”

If we teach today's students as we taught yesterday's, we rob them of tomorrow.

John Dewey

Further complicating the transition to postsecondary and career is the fact that traditional academic knowledge is no longer the only predictor of future success. Businesses and colleges report the skills that keep students from succeeding in both postsecondary opportunities and in the workforce include their inability to set goals, manage time, problem-solve, create, persist with challenging tasks, and recognize when help is needed and be able to ask for it (Wagner 2008, Conley 2014).

Since the importance of a high school diploma and being college and career ready is not debatable, three questions arise:

- How do we engage students in their learning so they do graduate?
- How do we make their preK-12 school experience relevant to their future?
- And most important for this report, how do competency-based pathways address both?

The Iowa Department of Education Guidelines for PK-12 Competency-based Pathways, <http://tinyurl.com/IowaCompEdGuidelines>, outline the principles for competency-based education (CBE) in Iowa:

- Students advance based on proficiency;

- Competencies include explicit, measurable, and transferable learning objectives that empower students;
- Students receive rapid, differentiated support based on their individual learning needs; and
- Learning outcomes emphasize competencies that include application and creation of knowledge along with development of important skills and dispositions.

The Competency-Based Education Task Force remains committed to these principles and submits this final report of the state's progress and recommendation to launch the transformative work that must take place in Iowa schools in order to create the learning opportunities that will truly prepare our students for life beyond school in the global economy and environment that characterizes the 21st century.

Executive Summary

Task Force Background:

The Competency-Based Education Task Force met twice in 2012 as a full task force, with multiple meetings of work groups between those dates. The task force submitted its [preliminary report](#) on January 15, 2013. That report included 22 recommendations for consideration during the 2013 legislative session.

The whole group met five times in 2013 and continued to work on the charges given by SF 2284, its own recommendations from the preliminary report, and a draft strategic plan, which was added by HF 215.

Acknowledgements: The task force would like to thank the Legislature and the Iowa Department of Education for their positive response to the recommendations in our preliminary report. Most specifically, the members are encouraged by the appropriation of the funding requested in our preliminary report, the establishment of the 10 pilot districts to continue the work (the Iowa CBE Collaborative), and the commitment of consultants at the Department of Education to see through several of our recommendations and to begin groundwork on others. We would also like to thank the State Board of Education for continuing to place competency-based education on its list of top priorities for education in Iowa.

Preliminary Task Force Recommendations: See Appendix A for an update of the progress toward meeting the recommendations in the preliminary report. Recommendations that have not been completed but are considered necessary to continue will be included in the section with Final Task Force Recommendations.

Final Task Force Recommendations: The members of the task force continue to be committed to competency-based pathways as the educational environment that will prepare our students for the challenges of college, career, and life. Therefore, your support and dedication encourages us as we bring our task force to an end and make final recommendations for the Legislature, the State Board of Education, and the Department of Education to continue this work.

Explanation of each recommendation is included in the section below.

Final Recommendations of the Task Force

- 1) The Legislature should make changes to Iowa Code 256.7a(26)(1) to allow students younger than ninth grade to earn credit in any curricular area toward graduation if they complete the requirements for the credit. Current code specifies that such credit can be earned before ninth grade, but only in the curricular areas of English or language arts, mathematics, science, or social studies. Then the Department of Education should work through the process to update Chapter 12 to align with that code change.

- 2) The Department of Education should continue to monitor Iowa Code and Chapter 12 in light of advancement of competency-based education and make recommendations for change as appropriate.
- 3) The Department of Education should request that students, educators, parents, and community members from the Iowa CBE Collaborative districts/schools and/or other districts developing competency-based education present to, and answer questions from, the Senate and House education committees during future legislative sessions.
- 4) The Department of Education should establish a research partnership with an institution of higher education to monitor and evaluate CBE systems and share findings.
- 5) The Department of Education should establish a collaborative team with higher education (1) to support smooth transitions to postsecondary institutions for students with competency-based educational experiences in high school, (2) to work toward instituting training for pre-service teachers and aspiring administrators in competency-based environments, and (3) to encourage competency-based pathways in postsecondary opportunities for all Iowans.
- 6) The Legislature should fully fund the work of transformation from the current system of education to a competency-based system. Allocate \$1,000,000 per year, with carryover, for at least five years to the Department of Education for, but not limited to, the following:
 - At least two full-time consultants to lead the work of the Iowa CBE Collaborative and assist Area Education Agencies and other districts developing competency-based systems during the collaborative and to lead the work of statewide implementation after the collaborative;
 - Annual grants to the current Iowa CBE Collaborative districts and grants for possible added cohorts of competency-based districts;
 - Department of Education support of the Iowa CBE Collaborative and for processes, such as webinars, blogs, and conferences, to allow other districts access to the learning;
 - Development and delivery of professional development;
 - Writing of model competencies;
 - Development of model performance tasks and assessment;
 - Purchase of a recording and reporting system;
 - Development and continued updating of a tool kit for implementation; and
 - Evaluation of the process and progress.
- 7) The Department of Education, the Iowa CBE Collaborative, and other state and national experts should write model competencies that align with the Iowa Core and the universal constructs.
- 8) Whereas high-speed, quality Internet access is foundational to educational transformation and essential for 21st century learning opportunities for all students, the Legislature and the

Department of Education should follow the work of the STEM Advisory Council Broadband Committee and work toward their recommendations as appropriate.

- 9) Whereas it is also critical that educators and students have the hardware and software to support the work, assessment, and reporting of a 21st century learning environment including, but definitely not limited to, competency-based environments, the Legislature and the Department of Education should continue to investigate and support 21st century technology for every Iowa student.
- 10) The Department of Education should continue the Request for Proposal (RFP) process to find a suitable vendor for monitoring and reporting learning in a competency-based system.
- 11) The Department of Education should investigate what the Smarter Balanced Assessment Consortium has already developed in the area of competency assessment. If it is determined that further work is necessary, the Department of Education should bring together specialists in the areas of assessment and competencies to develop an Assessment Validation Rubric that complements the Competency Validation Rubric introduced in the preliminary report and included here in Appendix B and to develop a plan toward successful assessment and accountability for competency-based educational opportunities for students.
- 12) Over the course of the Iowa CBE Collaborative, the Department of Education and the collaborative, in collaboration with the Area Education Agencies, should define and support the professional learning districts will need for teachers and administrators to provide competency-based learning environments for preschool through high school and investigate and develop what to provide for parents, community members, legislators, State Board and other stakeholders.
- 13) The task force recommends that the Department of Education and the Iowa CBE Collaborative develop a framework for the transformation from the current educational system to a competency-based system and that the Department of Education move forward with the framework developed. A draft strategic plan is outlined on page 29.

Rationale and Urgency

Some of the over 3,000 students referenced above who do not graduate with their peers each year will eventually complete high school; some will earn a high school equivalency diploma and may even be successful in postsecondary endeavors, but others will never graduate at all. Additionally, not all of those who leave school are struggling students; our gifted students also drop out. A 2002 study by Renzulli and Park found that gifted male dropouts reported they left because they were failing courses and gifted female students left because they didn't like school.

However, as stated above, high school completion is not enough; our students must be prepared to succeed at postsecondary opportunities. Although graduation data for 2013 are not yet available, ACT results are. Sixty-six percent of the class of 2013 took the ACT; however, only 32 percent of those students met all four of the ACT college readiness benchmarks. These benchmarks are used to predict a 50 percent chance of earning a *B* in freshmen courses and a 75 percent chance of earning at least a *C* in freshmen courses.

Nationally, "about 40 percent of entering college students are required to take at least one remedial course before enrolling in credit-bearing coursework" (p. 14 Rothman 2013). Unfortunately, a Complete College America (2012) study found that only about 30 percent of those students show up for the remedial courses in which they enroll, and of those who complete the remedial course, 30 percent don't sign up for the gateway courses for which they prepared within two years (p. 2). Of those who complete the remedial courses, fewer than one in 10 complete community college in three years, and just over one-third complete a bachelor's degree in six years. Remediation is also not working.

According to a 2010 report from Georgetown University, the middle class is indeed shrinking; however, the movement is in two directions strongly correlated to education (Carnevale, Smith and Strohl). Dropouts, high school graduates, and people with some college but no degree are falling out of the middle class.

As Figure 1 demonstrates, in 1970, 46 percent of dropouts and 60 percent of high school graduates were middle class, but by 2007 only 33 percent of dropouts and 45 percent of high school graduates were able to maintain middle class incomes (p. 3). Both groups recorded increases in the lower three income levels (dropouts 39 percent to 59 percent, high school graduates 22 percent to 35 percent) (p. 3).

Figure 1: Income ranges by education level.

	1970 Income Range			2007 Income Range		
	Lower 3	Middle 3	Upper 3	Lower 3	Middle 3	Upper 3
Dropouts	39%	46%	15%	59%	33%	8%
High School	22%	60%	18%	35%	45%	20%
Bachelor's	16%	47%	37%	14%	38%	48%
Graduate Degree	13%	46%	41%	9%	30%	61%

From Carnevale, A. P., Smith, N., and Strohl, J. (2010). *Help wanted: Projections of jobs and education requirements through 2018*.

During that same time period, the percent of adults in the three middle income ranges with bachelor's or graduate degrees also declined (bachelor's 47 percent to 38 percent, graduate degrees 46 percent to 30 percent); however, both groups also saw decreases in the lower three income ranges (bachelor's 16 percent to 14 percent, graduate degrees 13 percent to 9 percent) and significant increases in the upper three income ranges (bachelor's 37 percent to 48 percent, graduate degrees 41 percent to 61 percent) (p.3).

The same report predicts that up to 46.8 million jobs will likely be created in America by 2018, but only 36 percent will be available to those with a high school diploma or less, while those with some college or an associate's degree will qualify for another 30 percent of those positions, and workers who hold bachelor's degrees or higher will fill the remaining 33 percent (p. 13). The authors further explain that just as the industrial changes of the 19th and early 20th centuries demanded the development of a "mass K-12 education system to feed workers into the manufacturing industries," the current shift toward a combination of information and service industries demands a "mass postsecondary system to fill the needs of sophisticated new industries" (p. 15).

Although there is no one reason students drop out of school and many are not even failing when they drop out, Gallup (Clifton 2011) says students drop out because they lose hope that they will graduate, and they lose hope of graduating because they are not excited about what they see for themselves in the future. They cannot translate what they do in school to what *might* happen in the future. Clifton says we must systemically work toward connecting with them before they reach that point. Competency-based education purposely builds connections between students and their passions and the content of what is being learned.

Tony Wagner (2008) explains that in our "highly competitive global 'knowledge economy,' *all students need new skills* for college, careers, and citizenship" and that the problem is not that our schools are failing but that "they are obsolete" (p. xxi). The focus is on the wrong thing. Although content is important, Wagner presents seven survival skills for the 21st century: critical thinking and problem-solving, collaboration and leading by influence, agility and adaptability, initiative and entrepreneurialism, effective oral and written communication, accessing and analyzing information, and curiosity and imagination. Professors at MIT told Wagner not even freshmen who come out of AP classes know how to analyze, solve problems, or even observe.

The Partnership for 21st Century Skills has been instrumental in working with state agencies and others across the country for over 10 years. Its central message: ALL of our students must engage in academic content in such a way that they become effective and efficient at communication, collaboration, critical thinking, and creativity (www.p21.org).

Like these national experts, Elliott Smith (2013) of the Iowa Business Council (IBC) argues that the skills and knowledge required by the 21st century workplace go beyond content knowledge; acquiring those skills will determine whether Iowa businesses succeed in the world marketplace. Smith further argues that our "technology-driven economy" means Iowa's workforce must be proficient in math, science, reading and comprehension, as well as other disciplines. However, more is required; the workforce must also be financially literate and demonstrate other skills, including problem-solving, creative thinking, team-building and cultural awareness. The IBC

urges policymakers and educators to dedicate the resources necessary to ensure “the next generation of Iowa leaders is prepared to actively contribute to society and secure their own success” (Smith 2013). Their goal for Iowa students is to “lead the way in competently applying learned knowledge.” However, such a task is not possible with “cosmetic changes to the existing system.” It requires high expectations, vision, and the courage to transform the system.

This task force believes that transformation should focus on developing competency-based educational opportunities for all Iowa students -- opportunities that engage students within their own areas of interest connected to their passions, as well as ensure students have quality, engaging experiences with content. Competency-based education “puts students at the center, replacing rigid time-based structures with flexible learning environments that ensure students receive the support and extra time they need to succeed. This highly personalized approach provides clear, individualized pathways to student proficiency that help mobilize stakeholders around the collective goal of college and career readiness for all students” (Knowledge Works 2013).

We have done many parts of what we are now calling competency-based education over the years. We have considered proficiency on standards, formed collaborative work groups, and tried to engage students in their areas of interest, but competency-based education goes beyond all of that. In a competency-based system, students must move beyond acquiring knowledge and skills and demonstrate transfer of the knowledge and skills. They must actually use them.

In the context of competency-based education, proficiency means the students have demonstrated the ability to continue to a higher level within that content area or use the knowledge and skills in another context -- not that they simply squeaked by. Competency-based education holds students to a higher standard.

Our schools are primed for this transformational change for several reasons. First, technology—both the technology teachers can use to record and report and the technology students can use to do the work. Even our current student management systems are not enough, but there are companies developing some highly interactive, quality products that will give teachers the tools they need to record and then make sense of all the diverse data they will be collecting, as well as provide 24/7 access to data for students and parents. Providing personalized instruction for even a handful of students was mindboggling before the Internet brought the world into a handheld device -- and before a generation of technologically savvy students moved into our classrooms. Now they can take ownership of their learning at school just as they do outside of school.

Second, the world demands transformational change. We live in a competency-based world. No one really cares what facts and figures someone can recite. They want to know what you can do with what you know and if you can find what you don't know; if you can ask questions; if you know when to ask for help and are willing to do so; if you can work collaboratively on a problem that doesn't have simple answers; if you can think and do!

And finally, our students are demanding transformational change. They are dynamic, connected learners who ask tough questions of the world around them, who go out and find what they

need when it connects with a passion, who spend hours on a quest to provide an answer to a question a friend might have asked, who blog, tweet, and create how-to and informational videos. Then they sleep a few hours and get up and go to school. Competency-based education allows students to own their learning at school in much the same way.

Iowa Progress toward Competency-Based Education

Background: The State Board of Education listed competency-based education as a priority in 2010, and the Department of Education began investigating the concept in early 2011 through a State Board task force, which resulted in a state forum on competency-based education in December 2011. The State Board continues to hold competency-based education as a priority. Governor Branstad included competency-based education in his 2011 Blueprint for Education (Glass, Fandel, Darnall 2011). In the 2012 legislative session, the Legislature eliminated the Carnegie unit as the only method of earning credit toward high school graduation and outlined the work of the current legislated Competency-Based Education Task Force.

The preliminary report, which was filed in January of 2013, included 22 recommendations toward implementation of competency-based education (see Appendix A). When that report was placed online, a representative of the Carnegie Foundation called the Department of Education consultant leading the task force to congratulate the state on a “compelling and purposeful report.” She further explained that the Carnegie Foundation believes there is a better way to determine credit than the Carnegie unit, but until now, there has not been anything promising. They are, however, following the work of states moving toward competency-based education since it seems to be the most likely alternative yet.

Since the January report was filed, the task force and others have continued to investigate competency-based education and to work on as many of the recommendations from that report as possible. The Department of Education also joined the Innovation Lab Network, a part of the Council of Chief State School Officers, networking states working toward innovative change. Most of those states are investigating competency-based pathways. They have also partnered with REL Midwest and the Midwest Comprehensive Center at American Institute for Research (AIR).

Current Work: The Department of Education invited REL Midwest to conduct a survey of districts to determine the extent to which competency-based education is being implemented in Iowa. Although final data analysis was not complete at the filing of this report, preliminary data suggest that, while many Iowa districts report some implementation or planning toward competency-based pathways, far fewer report that they are using competency-based pathways that are in line with the recommendations and current thinking of this task force.

Several districts across Iowa have begun to work toward competency-based pathways for students. However, definitions and practices differ across the state. Muscatine and Spirit Lake, two districts highlighted in the preliminary report, have continued to expand their work.

Muscatine: As noted in the preliminary report, Muscatine began this work with its first cohort of teachers after attending the December 2011 Competency-Based Education Forum. A third cohort is currently investigating and learning about competency-based education. Each cohort includes teachers from elementary through high school and from a variety of disciplines. These teachers are transforming their classrooms to competency-based environments. Students, who

are randomly placed, have a competency-based education experience in those classes but a traditional experience in others.

Data from the 2012-13 school year includes a comparison between students who earn a C or higher in a competency-based education course and students who earn a C or higher in a non-competency-based education course (see Figure 2). The data show that nearly all students involved in a competency-based education course earned at least one C or better, but less than two-thirds earned at least one C or better in non-competency-based education courses. The comparison is between the combination of all competency-based education courses and all non-competency-based education courses rather than between competency-based education and non-competency-based education courses in the same content or grade level.

The significance of those grades goes beyond the difference between the percentage of students who earn a C or better. In a traditional grading system, students earn points in all kinds of ways that are not necessarily connected to learning the specific standards related to the course: extra credit, bonus questions, bringing in boxes of Kleenex, returning signed forms, or points on one section of a test that counterbalance another section on a different standard. Therefore, it is not clear if the students actually learned all of the content at the level expected for that grade. However, in a competency-based education system, students must demonstrate proficiency on the specific learning objective to earn credit.

Figure 2: Muscatine

2012-2013	First Semester	Second Semester
K-12 CBE students	973	957
Incomplete at semester	76 (7.8%)	49 (5.1%)
Remediation unsuccessful	13 (1.33%)	6 (0.6%)
Accelerated through content	20 (2%)	16 (2.4%)
High school students who earned a C or higher in CBE course	(99%)	(99.6%)
High school students who earned a C or higher in Non-CBE course	61%	62.8%

Spirit Lake: Although Spirit Lake continues to offer competency-based opportunities during its January term (J-Term) as outlined in the preliminary report, Spirit Lake also formed a competency-based, integrated 9th grade Core Academy. As those students move through the system, Spirit Lake expands this concept by one grade level. In the Core Academy, science, social studies, and language arts are explored in a two-period block that combines concepts and skills from each of these disciplines, which were previously taught as isolated "subjects." An online component to the learning engages students during another class period each day resulting in a blended learning environment.

Classes at Spirit Lake are approximately 100 students, so the ninth grade is divided into three groups of about 33 students. The groups of learners are facilitated by three content-specific teachers who provide first-hand examples of 21st century skills for their students as they collaborate, communicate, and think critically and creatively about how their content

intersects for students and new ways for students to connect and demonstrate learning. Two years of freshmen data are included in Figure 3. The data show that students are three to four times as likely to earn a C or better in competency-based education environments as in non-competency-based education environments. This is significant for freshmen because earning all credit in the freshman year is a critical predictor of high school graduation. And, as explained above, these grades earned in a competency-based environment indicate demonstration of proficiency, not just gathering enough points to make the grade.

Figure 3: Spirit Lake High School

2012-13: Core Courses are CBE	First Semester	Second Semester
Freshmen	113	113
*Not yet proficient at semester	8 (7%)	13 (12%)
*Must retake a core course (Ds/Fs)	5 (4.4%)	10 (9%)
Non-CBE Ds/Fs	33/20 (20%)	43/28 (28%)
2011-2012: No CBE Courses		
Freshmen	95	95
Must retake a core course (Ds/Fs)	15 (16%)	30 (32%)
Ds or Fs	46/19 (20%)	82/35 (38%)

* In a CBE course, Ds and Fs are not awarded. The student is simply not yet proficient and must work on the competencies that are not yet proficient or retake the course.

The Future of CBE in Iowa: The Iowa CBE Collaborative

In our preliminary report, we recommended the Legislature direct the Iowa Department of Education to “Identify up to 10 districts that would serve as models across the state and develop support for these districts to help them serve as Iowa-based models.” The Legislature provided that direction and the funding to accomplish it in the 2013 legislative session.

Application documents were posted in late August with a due date of September 27, 2013. Fourteen districts applied, and a 10-member selection team used the posted rubric to select the districts that would become the Iowa Competency-Based Education (CBE) Collaborative.

The Iowa CBE Collaborative will include Cedar Rapids, Collins-Maxwell, East Union, Howard-Winneshiek, Marshalltown, Mason City, Muscatine, Nevada, Spirit Lake, and Van Meter.

To facilitate the work, the Iowa CBE Collaborative will utilize a community of practice structure to leverage both face-to-face and technology-supported collaboration opportunities. Each month, leadership teams of up to 10 members, including administrators, teacher, and others, from each participating district will attend collaborative meetings to work together on the design and discuss implementation. In addition, throughout the month, collaborative participants will share progress, discuss challenges, and receive ongoing support for implementation. The collaborative will share the learning and progress through articles, webinars, blogs, and/or conferences open to the state.

Goal of the Collaborative: The Iowa CBE Collaborative will develop a framework for transition from the current educational system to a competency-based system.

Objectives of the Collaborative: The collaborative will develop a statewide network of CBE districts to study, take action, monitor results, adjust actions, and learn together in order to describe key structures, policies, and best practices for transitioning from the current educational system to a competency-based system that increases the number of students who meet college- and career-ready indicators at all grades. The collaborative will:

- Investigate, develop, and implement competency-based educational pathways for students.
- Establish demonstration sites among the participant schools.
- Define college- and career-readiness consistent with deeper learning.
- Identify college- and career-ready indicators.
- Develop model competencies and performance assessments.
- Identify appropriate assessments (formative and summative) and tools to monitor learning.
- Identify professional development needs for educators to make this transformation in their districts.
- Develop models for community and parent engagement.
- Facilitate seamless transitions within the PK-12 system.
- Facilitate seamless pathways to college and career.
- Create tools and processes to document and share results, challenges, and lessons learned from implementation.
- Describe the learning environment needed to accomplish these goals for students.

Initial Roles and Responsibilities

Iowa CBE Collaborative districts are required to:

Operate within the scope of the [Iowa Department of Education Guidelines for PK-12 Competency-based Pathways](#) and the parameters established within the overview documents available at <http://tinyurl.com/IA-CBE-Collaborative>.

- Commit to participation as a district
 - Participation from all levels of leadership
 - Willingness to implement district-wide over time
- Select/identify a leadership team of up to ten (10) people to participate in the Iowa CBE Collaborative and guide the work in the district. That team must include:
 - Superintendent and/or Curriculum Director
 - Principal of each building in which CBE is being implemented through the collaborative
 - Teachers implementing CBE through the collaborative
 - Optional: school counselor, assessment specialist, assistant principal, or others, as appropriate based on level of involvement of the work
- Participate fully in all collaborative activities, as described above (full leadership team)
- Attend all collaborative meetings
- Gather and report implementation data as requested
- Gather and report student learning data as requested
- Adhere to implementation practices and non-negotiables with fidelity
- Share learning (within district, within the collaborative, and across the state)
- Commit to create collaborative inquiry structures to support implementation
- Allocate resources to support implementation (Applicant districts must be prepared to assume responsibility for these expenses should grant funds be exhausted before the end of their participation in the collaborative.)
- Document grant fund and submit all grant fund expenditures as required
- Develop community partnerships

Institutes of Higher Education and Area Education Agencies are invited to:

- Provide coaching and support to network staff
- Assist in the development of professional development for districts/schools,
- Participate in all collaborative activities
- Help the Iowa Department of Education facilitate collaborative learning, and
- Other roles as appropriate

Iowa Department of Education will:

- Develop selection process and select districts to participate
- Distribute funding from legislation to selected districts
- Facilitate a collaborative learning/inquiry process for the collaborative
- Facilitate and participate in all activities
- Make policy requests to State Board and legislature as needed
- Monitor and ensure accountability and fidelity of implementation
- Provide support for collaborative districts
- Provide pressure and support for actions and outcomes
- Connect collaborative schools to work on a national level

Final Recommendations

In our [preliminary report](#), we made initial recommendations which now fit into the following categories:

- The task force or others have completed them,
- After further study, the task force has changed or eliminated them, or
- The task force recommends the Legislature and the Department of Education support continued work on them as a part of the Iowa CBE Collaborative, which in itself is the fulfillment of one of our recommendations.

A full explanation of all the recommendations in the preliminary report is included in Appendix A; however, recommendations that have not been completed will be furthered as final recommendations and explained in this section.

As in the preliminary report, recommendations are divided into three categories. First, we include overarching recommendations. The second category is subdivided into the five specific charges given by the Legislature. Finally, we offer a recommended strategic plan for statewide implementation in response to HF 215.

Final Task Force General Recommendations

- 1) The Legislature should make changes to Iowa Code 256.7a(26)(1) to allow students younger than ninth grade to earn credit in any curricular area toward graduation if they complete the requirements for the credit. Current code specifies that such credit can be earned before ninth grade but only in the curricular areas of English or language arts, mathematics, science, or social studies. Then the Department of Education should work through the process to update Chapter 12 to align with that code change. (Legislature: 2014 Session for code change; Department of Education: 2014 for Chapter 12 change)

As per Recommendation 5 in the preliminary report, Department of Education consultants and task force members conducted a review of Iowa Code and Administrative Rule (Chapter 12) to align that document with SF 2284. The investigation revealed one part of Chapter 12 that the task force recommended changing. The definition of unit was updated to include a competency-based option.

A review of Chapter 12 revealed another section that limits competency-based educational pathways for our students. Section 12.5(4)(1) allows that “an individual pupil in a grade that precedes ninth grade may be allowed to take a course for secondary credit” under several circumstances. Number 2 in that list of requirements is that “the course is in the curricular area of English or language arts, mathematics, science, or social studies.” This requirement in Chapter 12 is based on Iowa Code 256.7a(26).

Since two of the foundational principles of competency-based education are that students move on when ready and that they receive credit upon demonstration of proficiency, restricting students' advancement and credit to only the areas of English or language arts, mathematics, science, or social studies limits the transition to competency-based educational environments for all students.

Therefore, we recommend words be struck from Iowa Code 256.7a(26)(1) as indicated here:

(1) The rules establishing high school graduation requirements shall authorize a school district or accredited nonpublic school to consider that any student who satisfactorily completes a high school-level unit ~~of English or language arts, mathematics, science, or social studies~~ has satisfactorily completed a unit of the high school graduation requirements for that area as specified in this lettered paragraph, and shall authorize the school district or accredited nonpublic school to issue high school credit for the unit to the student. [Iowa Code 256.7a (26)(1)]

Once that change has happened, the Department of Education should request the subsequent rule change.

- 2) The Department of Education should continue to monitor Iowa Code and Chapter 12 in light of advancement of competency-based education and make recommendations for change as appropriate. (Department of Education: Ongoing)
- 3) The Department of Education should request that students, educators, parents, and community members from the Iowa CBE Collaborative districts/schools and/or other districts developing competency-based education present to, and answer questions from, the Senate and House Education Committees during future legislative sessions. (Education Committees: 2014 Session through 2019 Session)

Students and educators engaged in the work continue to be the best to express how the work is progressing.

- 4) The Department of Education should establish a research partnership with an institution of higher education to monitor and evaluate CBE systems and share findings. Encourage publication of the findings to add to the body of literature, which is very minimal at this time. (Department of Education: ongoing)
- 5) The Department of Education should establish a collaborative team with higher education (1) to support smooth transitions to postsecondary institutions for students with competency-based educational experiences in high school, (2) to work toward training for pre-service teachers and aspiring administrators in competency-based environments, and (3) to encourage competency-based pathways in post secondary opportunities for all Iowans. (Department of Education: Ongoing)

6) The Legislature should fully fund the work of transformation from the current system of education to a competency-based system. Allocate \$1,000,000 per year, with carryover, for at least five years to the Department of Education for, but not limited to, the following:

- At least two full-time consultants to lead the work of the Iowa CBE Collaborative and assist Area Education Agencies and other districts developing competency-based systems during the collaborative and to lead the work of statewide implementation after the collaborative;
- Annual grants to the current Iowa CBE Collaborative districts and grants for possible added cohorts of competency-based districts;
- Department of Education support of the Iowa CBE Collaborative and the processes, such as webinars, blogs, and conferences, to allow other districts access to the learning;
- Development and delivery of professional development;
- Writing of model competencies;
- Development of model performance task and assessment;
- Purchase of a recording and reporting system;
- Development and continued updating of a tool kit for implementation, and
- Evaluation of the process and progress.

(Funding: Legislative Session 2014; Lead: Department of Education, ongoing; Oversight and Distribution of Funds: Department of Education, ongoing)

National organizations working to investigate and promote competency-based pathways for students across the country recognize the necessity of a statewide team that should be “led by and have commitments from the highest levels in the state” (Achieve 2013).

Funding at this level would ensure the Department of Education and others working toward this transformation would be able to support the work of the Iowa CBE Collaborative with grants for district participant expense; national experts to inform the work of writing competencies, scoring rubrics, and performance assessments; a system for recording, monitoring, and reporting, and evaluation of the process.

Although the Department of Education is deeply committed to competency-based education in philosophy and has provided leadership for the task force and for the work to this point, leadership of, and work within and after, the Iowa CBE Collaborative will require much more hands-on work over the next five years and beyond if competency-based education is to be successfully implemented statewide.

The task force recommends two full-time equivalent positions with a combination of expertise to include at least competency-based education, leadership, curriculum development, educator development, and an understanding of technology and its use both in the educational environment by educators and students and for monitoring and reporting.

The job responsibilities would include:

- Work with national and state leaders to develop, implement, monitor and adjust the long-term plan for the Iowa CBE Collaborative.
- Facilitate all work of the CBE Collaborative including:
 - Planning and delivering the monthly meetings;
 - Providing differentiated training and support for Collaborative team members;
 - Providing professional development for CBE Collaborative team members;
 - Leading the creation of model competencies aligned with the Iowa Core;
 - Leading the development of scoring guides for assessing and monitoring student performance in relation to the competencies;
 - Leading the study, selection, and implementation of a comprehensive system of assessing student learning in a competency-based learning environment;
 - Leading the study, selection, and implementation of a learning management system for documenting, tracking, and reporting student learning in a competency-based learning environment; and
 - Documenting, analyzing, and using the learning within the collaborative to create an evidenced-based framework for statewide implementation of CBE based on the most effective practices within the collaborative.
- Maintain a statewide connection during the five years the collaborative team is working together so other schools/districts may benefit from the work. The statewide connection could include:
 - Creating a webinar after each meeting to post for statewide viewing;
 - Developing and monitoring a website used for collaboration by the collaborative and the pages of the website used for statewide discrimination of the work and conversation about the work; and
 - Planning an annual conference.
- Spend one-to-three days in each of the collaborative schools between monthly meetings to develop a central understanding of what is happening in the districts, how they can network to help each other, and how to better use the collaborative face-to-face time and the virtual learning time. Spend time in classes, with teachers and administrators, in PLCs, and faculty meetings and in the community. (All schools visited at least three times per school year.)
- Bring together the national, state, and collaborative experts necessary to do the work of writing model competencies, scoring guides, and assessments. These work groups will be necessary for each of the content areas. (This is different from the work of the collaborative during the monthly face-to-face meetings. That time will be used to learn about the work of writing competencies, scoring guides, and assessments but there will not be enough time to actually write them.)
- Lead the development of the tool kit to be used for statewide implementation.
- Work with the higher education partners to facilitate conversation statewide toward smooth transitions for graduates to post secondary opportunities, development of teacher preparation and administrator preparation that produces graduates prepared to work in competency-based environments, and work toward competency-based postsecondary environments.

- Work with Area Education Agency partners to develop understanding about CBE. Ultimately will work with AEA partners for dissemination of the statewide implementation framework.
- Keep Iowa connected nationally and learn from national partners in this work.

Final Recommendations Specific to Task Force Charge (SF 2284)

Redefining Credit Based on Carnegie Unit to Credit Based on Competency Final Recommendations

The preliminary report recommended use of a Competency Validation Rubric to guide competency development and that statewide effort be made to develop model competencies aligned to the Iowa Core and the universal constructs. (See Appendix C for universal constructs.)

A draft validation rubric was presented in the preliminary report and the Iowa CBE Collaborative and task groups associated with the collaborative will begin the task of writing model competencies. However, this complex work will also require state and national experts -- content experts and competency experts -- and will take several years. Therefore, we offer the following recommendation:

- 7) The Department of Education, the Iowa CBE Collaborative, and other state and national experts should write model competencies that align with the Iowa Core and the universal constructs. (Department of Education and the Iowa CBE Collaborative, ongoing)

Empower Learning through Technology Final Recommendations

Technology is foundational to the transformation of the education system. Therefore, the task force chose to investigate technology needs as a part of each of the other areas. As described in our preliminary report, the task force continues to be concerned that many districts in the state do not have access to state-of-the-art technology or indeed even to minimal requirements to make this transition.

In the preliminary report, the task force recommended that the Department of Education be asked to “investigate and make recommendations on the development of an infrastructure that supports the connectivity necessary to provide every student with the opportunity to learn no matter where they live.” Since that report, the governor has appointed a STEM Advisory Council Broadband Committee. He charged that committee with the following:

- Recommend policies to encourage build out of broadband technologies throughout the state, particularly in un-served and underserved areas (by December 1, 2013);
- Identify and pursue federal funding and private partnerships to achieve the goal of *Connecting Every Iowan*; and

- Develop a long-term broadband strategy for Iowa (by Jan. 1, 2015).

Therefore, this task force recommends the following:

- 8) Whereas high-speed, quality Internet access is foundational to educational transformation and essential for 21st century learning opportunities for all students, the Legislature and the Department of Education should follow the work of the STEM Advisory Council Broadband Committee and work toward their recommendations as appropriate. (Legislature: 2014 Session and ongoing; Department of Education: 2014-2015 and ongoing)
- 9) Whereas it is also critical that educators and students have the hardware and software to support the work, assessment, and reporting of a 21st century learning environment including, but definitely not limited to, competency-based environments, the Legislature and the Department of Education should continue to investigate and support 21st century technology for every Iowa student. (Funding: Legislature, ongoing; Lead: Department of Education, ongoing)

Learning Plans and Templates Final Recommendations

The preliminary report included a proposed definition of a learning plan: A personalized student learning plan is the driver of learning that is housed online and incorporates a student learning profile, documents the pathway of a student's learning progress, organizes evidence of student learning, and coordinates feedback from peers, parents, and educators.

The goal at that time was to make a recommendation about a recording and reporting system and to provide projected costs in this report. However, the investigation has taken longer than anticipated. The Department of Education is currently developing a Request for Proposals (RFP) for a system to work with the Iowa CBE Collaborative. Therefore, the task force makes the following recommendation:

- 10) The Department of Education should continue the RFP process to find a suitable vendor for monitoring and reporting learning in a competency-based system. (Department of Education: 2013-2015; Future Funding: Legislature 2015 or 2016 Session)

Iowa schools currently involved in competency-based education as well as national advisors indicate this step is foundational to success. Educators will become discouraged if they are not able to efficiently and effectively record and report student learning in this complex system. Parents and community members become confused and disillusioned when student learning needs and progress are not transparent and immediate.

Assessment and Accountability Final Recommendations

Successful implementation of competency-based education requires competencies aligned to the Iowa Core, the technology to support the needs of both students and educators, and a deep understanding of and commitment to quality, aligned formative and summative assessments.

And, as the task force acknowledged in the preliminary report, no one can write all the assessments. However, the Department of Education should provide models and guide educators toward knowing what quality assessment is in a competency-based learning environment.

National competency-based expert Rose Colby told participants at the Iowa ASCD conference in June 2013 that what we need is “common scoring guides for uncommon assessments” (Colby 2013). Educators must know what the competency requires, have a deep understanding of the standards associated with the competency, and know how to assess if students have demonstrated proficiency on those standards and competencies even when the products being assessed are quite different.

Therefore, the task force would like to bring forward the following recommendations from the preliminary report with some update:

- 11) The Department of Education should investigate what Smarter Balanced has already developed in the area of competency assessment. If it is determined that further work is necessary, the Department of Education should bring together specialists in the areas of assessment and competencies to develop an Assessment Validation Rubric that complements the Competency Validation Rubric introduced in the preliminary report and included here in Appendix B and to develop a plan toward successful assessment and accountability for competency-based educational opportunities for students. (Lead: Department of Education, Iowa CBE Collaborative, 2013-2019)

Professional Development Final Recommendations

In preparation for statewide implementation, the Department of Education will identify needs and resource toward the professional learning necessary for administrators and teachers to work through the transformation as well as how to engage parents and community in the work.

- 12) Over the course of the Iowa CBE Collaborative, the Department of Education and the collaborative, in collaboration with the Area Education Agencies, should define and support the professional learning districts will need for teachers and administrators to provide competency-based learning environments for preschool through high school and investigate and develop what to provide for parents, community members, legislators, the State Board, and other stakeholders. (Department of Education and Area Education Agencies, ongoing; Iowa CBE Collaborative, 2013-2019)

This professional development must be aligned to the Iowa Core, the universal constructs, and the Iowa Professional Development Model. The group should leverage models of social authoring, social learning, and social networking as well as traditional face-to-face professional development.

Draft Strategic Plan (HF 215)

- 13) The task force recommends that the Department of Education and the Iowa CBE Collaborative develop a framework for the transformation from the current educational system to a competency-based system and that the Department of Education move forward with the framework developed. The task force offers the following draft strategic plan toward statewide implementation of competency-based education.

Goals:

- Over the next five years the Department of Education and the Iowa CBE Collaborative will develop a framework for transition from the current educational system to a competency-based system.
- The Department of Education and the collaborative will provide avenues for others involved in competency-based education to follow and benefit from the learning of the collaborative.

Objectives:

- Continue to define and use common language around the transformation to competency-based education.
- Define college and career readiness consistent with deeper learning and identify college and career ready indicators.
- Develop an Assessment Validation Rubric.
- Develop model competencies, scoring rubrics, and performance tasks.
- Identify appropriate assessments (formative and summative) and tools to monitor learning.
- Develop effective and efficient ways to record and report student progress on competencies.
- Identify professional development needs for both pre-service and in-service educators to make this transformation in their districts.
- Develop models for community and parent engagement.
- Facilitate seamless transitions within the PK-12 system.
- Facilitate seamless pathways to college and career.
- Describe the learning environment needed to accomplish these goals for students.
- Establish demonstration sites among the participant schools.

Theory of Action:

In order to effectively transform our current system of education to a competency-based system, which will be based on student learning and passions and focused on their futures, the Department of Education, the Iowa CBE Collaborative, and their AEA, postsecondary, and national partners must engage in the following:

- Continue to build on the shared vision and the common language begun by this task force.
- Develop deep understanding of competency-based education and how the Iowa Core, the universal constructs and college and career readiness all work together to provide a solid foundation for our students.
- Develop collaborative districts as Iowa demonstration sites.
- Investigate, implement, and monitor effective classroom and out-of-school learning opportunities.
- Write model competencies, scoring guides, and performance tasks.
- Develop professional development for pre service and in service educators.
- Find a suitable vendor for recording, monitoring, and reporting competency-based education.
- Engage parents and community in the education process.
- Share their work with the rest of the state through websites, webinars, blogs, and conferences.
- Develop a toolkit for transformation from the current system to a competency-based system.
- Work toward smooth transitions for all students both during their PK-12 years and into postsecondary opportunities and career.
- Use the framework developed to implement statewide with the collaborative sites as local demonstration sites.

Outcome:

- A framework and implementation toolkit for transformation from the current education system to a competency-based system that embraces personalized learning for all students;
- District, AEA, state level, and postsecondary leaders prepared to guide that transformation;
- Demonstration sites across Iowa; and
- Multiple, personalized pathways for all Iowa students toward high school graduation prepared for college, career, and life beyond school.

Conclusion

It is a bold step to even hint at transformation of a system that has been a foundational part of our society for over 100 years, but after nearly two years of study, debate, and consensus building, this task force believes even more strongly that all Iowa students will benefit from competency-based educational opportunities.

Competency-based education puts students at the center and develops pathways through which they connect to content through their passions and interests. Students are given credit for learning wherever, whenever it happens. They help to develop their own learning opportunities, which in itself prepares them for lifelong learning. Educators begin to develop educational environments through which students engage in content in ways that promote increased competence in the universal constructs.

The elimination of the Carnegie unit as the only means of earning credit in Iowa high schools and the formation of this task force launched us into a pivotal time in education for Iowa. The Iowa CBE Collaborative will move the work forward, and the resulting framework will allow us to make a statewide shift if the Legislature, the State Board of Education, the Department of Education, and educational leaders across the state continue to support this work.

As this task force comes to an end and turns the work to the collaborative, we have two final thoughts:

- Our students deserve our very best; therefore, we must continue to support this transformation.
- *All* students deserve our very best; therefore, we must work with a sense of urgency.

Therefore, we submit that if Iowa educators come together to investigate and develop a framework for transformation that is used for statewide implementation of competency-based education, our system of education will be transformed and all Iowa students will benefit.

References

- Achieve (2013). *Advancing competency-based pathways to college and career readiness: A state policy framework for graduation requirements, assessment and accountability*. Retrieved from www.achieve.org.
- Carnevale, A. P., Smith, N., and Strohl, J. (2010). *Help wanted: Projections of jobs and education requirements through 2018*. Washington, DC: Georgetown University Center on Education and the Workforce. Retrieved from <http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/FullReport.pdf>
- Clifton, J. (2011) *The coming job wars: What every leader should know about the future of job creation*. New York: Gallup Press.
- Colby, R.L. (2013 June) Keynote presentation at IA-ASCD conference, Des Moines, Iowa. (Attendee notes).
- Complete College America. (2012, April) *Higher education's bridge to nowhere*. Retrieved from http://www.insidehighered.com/sites/default/server_files/files/CCA%20Remediation%20ES%20FINAL.pdf
- Conley, D. (2014) *Getting ready for college, careers, and the common core*. San Francisco: Jossey-Bass.
- Glass, J., Fandel, L., and Darnall, B. (2011) *One unshakable vision: World-class schools for Iowa*. Des Moines, Iowa. Retrieved from <http://governor.iowa.gov/files/Education%20Blueprint.pdf>
- Harvard Graduate School of Education. (2011) *Pathways to prosperity: Meeting the challenge of preparing young Americans for the 21st century*. Cambridge, Massachusetts. Retrieved from http://www.gse.harvard.edu/news_events/features/2011/Pathways_to_Prosperty_Feb2011.pdf
- Iowa Department of Education Guidelines for PK-12 Competency-bases Pathways. Retrieved from <http://tinyurl.com/IowaCompEdGuidelines>
- Knowledge Works. (2013) *Competency education series: Policy brief on an emerging federal role for competency education*. Retrieved from <http://tinyurl.com/Fed-Role-CBE>
- Renzulli, J.S. and Park, S. (2002) *Giftedness and high school dropouts: Personal, family, and school-related factors*. Storrs, Connecticut. Retrieved from <http://www.gifted.uconn.edu/nrcgt/reports/rm02168/rm02168.pdf>
- Rothman, R. (2012) "A common core of readiness." *Educational Leadership*, 69(7) 11-14.
- Smith, E. (2013, September 20). Personal Interview.
- Wagner, T. (2008) *The global achievement gap*. New York: Basic Books.

Appendix A: Update on Recommendations in the Preliminary Report

- 1) The Legislature should invite educators and students from the schools that are already experiencing success with competency-based pathways to present and answer questions during the 2013 session.
 - Completed: This was completed in January 2013 with a presentation by students and educators from Muscatine High School to both the Senate and the House Education Committees. The final report recommends the Legislature continue to receive updates from students in the Iowa CBE Collaborative schools.
- 2) Develop common language and vision for competency-based education and a shared operational definition of a competency.
 - Completed: The following definition of a competency and explanation were developed by the task force and placed in the *Iowa Department of Education Guidelines for PK-12 Competency-based Pathways*:

A competency is an enduring understanding that requires the transfer of knowledge, skills, and dispositions to complex situations in and/or across content areas and/or beyond the classroom.

Multiple standards both within and across disciplines outline the knowledge, conceptual understanding, abilities, and skills required to meet the complex demands of the competency. Although individual standards may be assessed/demonstrated at any level of Blooms Taxonomy or Webb's Depth of Knowledge, the expectation of deeper learning related to the competency requires assessment/demonstration at the upper levels of Bloom's (analyze, evaluate, create/synthesize) or Webb's (Level Three: Strategic Thinking, Level 4: Extended Thinking) as well as the appropriate use of the universal constructs, dispositions, and employability skills.

Common language is outlined in the *Iowa Department of Education Guidelines for PK-12 Competency-based Pathways*. The Department of Education continues to update these guidelines as appropriate.
- 3) Develop a continuum rubric that outlines the transformation from traditional to competency-based.
 - Changed: This recommendation was changed to the creation of a tool kit with further recommendation that the Iowa CBE Collaborative continue to develop the kit begun by the task force.
- 4) Identify up to 10 districts that would serve as models across the state and develop support for these districts to help them serve as Iowa-based models.

- Completed: This recommendation was completed by the 2013 legislative session with the establishment of the Iowa CBE Collaborative. Ten districts have been selected and will continue this work and report annually to the Legislature and State Board through January 2019. (Cedar Rapids, Collins-Maxwell, East Union, Howard-Winneshiek, Marshalltown, Mason City, Muscatine, Nevada, Spirit Lake, Van Meter)
- 5) Conduct a review of current policies, administrative rules, and education and para-educational practices that may block optimal implementation of competency-based education.
- Completed: This recommendation was completed by the task force and resulted in recommendations for changes in Administrative Rule to align with SF 2284. Those changes have been made. The task force included one recommendation for code change in the final report. The Department of Education should continue to investigate how the code and rule may need to change as competency-based education develops in the state.
- 6) Establish a research partnership with an institution of higher education to monitor and evaluate the work and share findings.
- Forwarded: The Department of Education is encouraged in this final report to ensure that competency-based education is evaluated and the findings shared.
- 7) Establish a collaborative team with higher education to support smooth transitions for students with competency-based educational experiences in high school, to facilitate entrance into post-secondary institutions, and to work toward instituting training for pre-service teachers and aspiring administrators in competency-based environments.
- In process: The Iowa CBE Collaborative has invited higher education partners to join the collaborative as the Higher Education CBE Partnership.
- 8) Investigate how this work connects to and could support the Governor's STEM initiative and the recommendations of the Educator Quality Task Force.
- In process: The Department of Education and the task force have both partnered with STEM managers and with the members of the advisory council. The task force encourages continuation of this communication and connection.
- 9) We recommend that members of the Legislature join members of the task force at the Iowa Association of Supervision and Curriculum Development (ASCD) Conference "Define, Design, Deliver" on June 26-27 in Des Moines. The theme for the conferences is competency-based education.
- Completed: This recommendation was completed in June 2013. Two representatives and 16 consultants from the Department of Education attended the conference. The conference had over 250 attendees.

10) We recommend that Iowa begin planning for a Midwest regional conference on competency-based education to be held in June 2014.

- Ongoing: The Department of Education and the Iowa CBE Collaborative will partner with IA-ASCD to provide a second conference on competency-based education June 23-24, 2014. Content of the conference will evolve from the work of the Iowa CBE Collaborative. At this point the Department of Education plans to have a conference each summer.

Redefining Credit Based on Carnegie Unit to Credit Based on Competency Preliminary Recommendations

11) Establish the criteria for writing and critiquing competencies.

- Completed: A Competency Validation Rubric is included in Appendix B. The Iowa CBE Collaborative will pilot this rubric and make recommendations for changes and adoption or for writing another rubric.

12) We recommended that statewide efforts be made to develop model competencies aligned to the Iowa Core and the universal constructs.

- Forwarded: The Department of Education and the Iowa CBE Collaborative should be supported in bringing state and national experts together to assist them in developing model competencies aligned to the Iowa Core and universal constructs as outlined in the final report.

Empower Learning through Technology Preliminary Recommendations

13) We recommend the state investigate and make recommendations on the development of an infrastructure that supports the connectivity necessary to provide every student with the opportunity to learn no matter where they live. The Legislature should direct the Department of Education to investigate this need.

- In Progress: The Governor's STEM Advisory Council Broadband Committee is conducting this investigation.

Learning Plans and Templates Preliminary Recommendations

14) Develop templates, models, rubrics as well as technology available to students for competency-based learning environments to work.

- Forwarded: The Department of Education and the Iowa CBE Collaborative should be supported to develop templates, models, and rubrics as well as technology needs for CBE environments as outlined in the final report.
- 15) Develop what is needed to record and report in a competency-based environment and work with the student management systems to provide what is needed for this transition.
- Forwarded: The Department of Education and the Iowa CBE Collaborative should purchase and pilot a management/recording and reporting system.
- 16) Develop training for teachers in use of learning plans and recording and reporting processes that become increasingly dependent on reliable, connected technology.
- Forwarded: The Department of Education and the Iowa CBE Collaborative should determine this process.

Assessment and Accountability Preliminary Recommendations

- 17) The state should bring together our state experts in assessment and competencies to develop an Assessment Validation Rubric that compliments the Competency Validation Rubric suggested by the competency work group.
- Forwarded: This should become part of the early work of the Iowa CBE Collaborative as outlined in the Final Report.
- 18) Develop a plan toward successful assessment and accountability for competency-based educational opportunities for students.
- Forwarded: This should become part of the early work and ongoing of the Iowa CBE Collaborative as outlined in the final report.

Professional Development Preliminary Recommendations

- 19) Establish a collaborative group of professional development and competency-based experts to create professional development to help educators understand what competency-based learning environments look like at different levels from preschool/kindergarten through high school.
- Forwarded: This should become part of the early and ongoing work of the Iowa CBE Collaborative as outlined in the Final Report.
- 20) Create professional development for administrators that includes understanding and leading the paradigm shifts being made by their teachers, students, parents and community members.

- Forwarded: This should become part of the early and ongoing work of the Iowa CBE Collaborative and the higher education committee as outlined in the final report.

21) Investigate what to provide for parents, community members, legislators, State Board and other stakeholders.

- Forwarded: This should become part of the early and ongoing work of the Iowa CBE Collaborative as outlined in the Final Report.

Recommendation for Future Consideration

22) Future consideration of mandated competency-based opportunities for all students.

- The task force continues to believe that competency-based opportunities are good for all students and should be supported as outlined in the Recommendations and Strategic Plan found in the final report.

Funding: The funding requests made in the preliminary report were all granted by the 2013 Legislature with one exception:

- Fully funded: \$100,000 to create of professional development; \$100,000 to develop of model assessments; \$100,000 to write model competencies; and \$25,000 to investigate and provide examples of templates that will effectively and efficiently record and report student achievement in a competency-based environment.
- Partially funded: \$100,000 per year for five years (\$500,000) to develop a network of up to 10 districts working on competency-based education for the purpose of developing the framework to help others across the state make this transformation. The first year was funded.

Appendix B: Competency Validation Rubric (Adapted from New Hampshire)

Competency Validation Rubric				
<i>The competency statement...</i>				
	Strong	Strong	Weaker	Weaker
	4	3	2	1
<p>Relevance to Content Area To what extent does this competency statement align with standards, leading students to conceptual understanding of content?</p>	<p>...aligns with national, state, and/or local standards/frameworks; areas may be combined or clustered for learning. ...articulates, in a clear and descriptive way, what is important in understanding the content area. ...connects the content to higher concepts across content areas.</p>	<p>...aligns with national, state, and/or local standards/frameworks; areas may be combined or clustered for learning. ...states what is important in understanding the content area. ...addresses conceptual content.</p>	<p>...has beginning alignment with national, state, and/or local standards/frameworks. ... is either too abstract or too specific in its content area focus. ...is so detailed in language that it obscures the connection to higher concepts.</p>	<p>...has little evidence of alignment with standards or frameworks ...focus on content is factual in nature without connection to concepts.</p>
<p>Enduring Concepts To what extent does this competency statement reflect enduring concepts?</p>	<p>...includes skills that are transferable across content areas and applicable to real-life situations. ...requires an understanding of relationships between/among theories, principles, and/or concepts.</p>	<p>...includes skills that are transferable across content areas with real-life connections. ...is based on concepts supported by topics and/or facts.</p>	<p>...is a statement specific to program/resource used. ...is based on topics applicable to the course.</p>	<p>...is limited to scope and sequence of textbook/program/resource. ...is very specific to facts in content.</p>
<p>Cognitive Demand What depth of knowledge does this competency statement promote?</p>	<p>...requires deep understanding of content as well as application of knowledge to a variety of settings. ...asks students to create conceptual connections and exhibit a level of understanding that</p>	<p>...reflects academic rigor and implies opportunities for students to apply knowledge in a variety of ways. ...asks students to create conceptual</p>	<p>...is limited in academic rigor and/or opportunities to apply knowledge. ...asks students to show what they know in ways that limit their ability to</p>	<p>...asks for routine or rote thinking or basic recall, and lacks opportunities to apply knowledge ...asks students to show what they know in</p>

	<p><i>is beyond the stated facts or literal interpretation and defend their position or point of view through application of content. ...promotes complex connections through creating, analyzing, designing, proving, developing, or formulating.</i></p>	<p><i>connections and exhibit a level of understanding that is beyond the stated facts or literal interpretation. ...promotes deep knowledge using reasoning, planning, interpreting, hypothesizing, investigating, or explaining.</i></p>	<p><i>build conceptual knowledge. ...requires engagement of mental practices such as identifying, defining, constructing, summarizing, displaying, listing, or recognizing.</i></p>	<p><i>simplistic ways. ...requires recall of information, facts, definitions, and terms such as reciting, stating, recognizing, listing, reproducing, memorizing or performing simple tasks or procedures.</i></p>
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And the competency must be assessable. Students may demonstrate in different ways.

Appendix C: Universal Constructs

Universal Constructs: Essential for 21st Century Success

Introduction: The universal constructs were compiled by an Iowa Department of Education work team. The committee members surveyed current literature, as well as such sources as the 1992 SCANS report, and agreed that these six constructs are necessary outcomes for each Iowa student to graduate prepared for success in career, college and citizenry.

The next step in the process was to expand the construct definitions in order to examine their complexity and identify the embedded concepts. Given the elaborated definitions and supporting instructional and professional development materials, teachers will be able to integrate the constructs into content and instructional practice, using a new, 21st century lens.

Critical Thinking: Critical thinking is the ability to access and analyze key information to develop solutions to complex problems that may have no clear answer. It incorporates reflective and visionary processes. Critical thinking utilizes abstractions and non-rules based strategies to guide decisions, behaviors and actions. Twenty-first century critical thinking reflects:

- Thoughtful questioning that challenges assumptions, promotes higher order thinking, leads to new insights, and validates perceptions
- Metacognition that supports reflective practice
- Processes that analyze, select, use, and evaluate various approaches to develop solutions
- Frame critical issues to develop innovative responses
- Analysis and synthesis of multiple sources and points of information
- Intentional use of disciplinary frameworks to analyze complex issues and information
- Suspension of judgment while collecting evidence to make determinations.

Complex Communication: Complex communication is based on the successful sharing of information through multiple means, including visual, digital, verbal, and nonverbal interactions. The message is purposeful, clear and concise, leading to an accurate exchange of information and ideas. Twenty-first century complex communication reflects:

- Negotiation processes that generate mutually satisfactory solutions
- Managing and resolving conflicts
- Interacting effectively with people of different cultures
- Selection and integration of various communication processes
- Integration of appropriate forms of information communication technology
- Understanding the interactions among modes of communication
- Meaningful and engaging interactions
- Focus, energy and passion around the key message
- Navigation through nuances of effective communication

Creativity: Creativity incorporates curiosity and innovation to generate new or original thoughts, interpretations, products, works, or techniques. Creativity is nurtured, advanced, and modeled through numerous approaches, including inquiry-based learning, abstract thinking, and student-focused learning. Twenty-first century creativity reflects:

- A disciplined process that includes skill, knowledge, imagination, inspiration and evaluation

- Capturing or collecting new ideas for current or future use
- Combination of seemingly unrelated ideas into something new
- Respectful exchange of ideas
- Engagement in formal and informal learning experiences
- Divergent thinking
- Entrepreneurial thinking that encourages unique thoughts and applications
- A comfort level with open-ended challenges that reflect multiple approaches and results
- Reconfiguration of current thought within a new context
- Pattern recognition across disciplines resulting in an innovative outcome

Collaboration: Collaboration is working among and across personal and global networks to achieve common goals. It requires cultural competence and personal and civic responsibility in all environments. Collaboration also requires open and flexible approaches to leadership.

Twenty-first century collaboration reflects:

- Non-hierarchical leadership based on individual skill sets
- Respect for a complex process that requires individuals to contribute and participate in meaningful interactions
- The belief that group synergy enhances productivity
- Understanding and application of effective group processes to solve problems
- Productive group interactions
- Respectful disagreement

Flexibility and Adaptability: Flexibility and adaptability include responding and adjusting to situational needs, and changing to meet the challenges of new roles, paradigms and environments. Flexibility and adaptability include the thoughtful balance between an individual's core beliefs and appropriate reaction to change. These dispositions are nurtured through life-long learning and continuous improvement. Twenty-first century flexibility and adaptability reflect:

- engagement in innovation and creativity
- intellectual agility
- embracing change
- expecting and accepting the emotions inherent in change while supporting those involved
- respect for unique qualities of others and self
- purposeful and thoughtful response to disruptions
- acknowledging and responding to dissonance in productive ways
- reflecting on positive and negative outcomes of risk-taking
- proactive and reactive approaches to change
- acknowledging ambiguity inherent in a changing environment

Productivity and Accountability: Productivity is prioritizing, planning, and applying knowledge and skills to make decisions that create quality results in an ever-changing environment. Individuals and teams demonstrate initiative, self-direction, and personal responsibility to add value to the world around them. Individuals demonstrate accountability through efficient time management, appropriate resource allocation, personal integrity, and self-monitoring to meet the demands of productivity. Individuals and teams recognize the interconnectedness of their actions at all levels. Twenty-first century productivity and accountability reflect:

- Ability to acquire new learning on one's own

- Application of appropriate processes and tools to facilitate task completion
- Self-sufficiency as required in a complex environment
- Identification of available opportunities
- Motivation and commitment to achieve
- Assuming leadership roles
- Building on prior learning and experience to apply knowledge and skills in a variety of contexts
- Self-confidence and self-respect

Universal Construct Key References

Achieve. (2008). *Cross disciplinary proficiencies in the American Diploma Project benchmarks*.

Costa, A. (2009). *Describing the habits of mind*. In Costa, A. & Kallick, B. (Ed.), *Learning and leading with habits of mind*. Alexandria, VA:ASCD.

Jerald, C.D. (2009) *Defining a 21st century education*. Center for Public Education.

NCREL/Metiri Group. (2003). *enGauge 21st Century Skills*.

Organization for Economic Co-operation and Development. (2003). *The definition and selection of key competencies*.

Palfrey, J. & Gasser, U. (2008). *Born digital*. New York, NY:Basic Books.

Partnership for 21st Century Skills.

Pink, Daniel. (2006). *A whole new mind: Why right-brainers will rule the future*. New York: Riverhead Books.

Secretary's Commission on Achieving Necessary Skills. (1992)

Wagner. T. (2008). *Global achievement gap*. New York, NY: Basic Books.