Senior Honors Projects

Honors Program at the University of Rhode Island

5-2014

Competency-based Education in Public High Schools

Angus M. Cantwell
University of Rhode Island, angus_cantwell@my.uri.edu

Recommended Citation

Competency-Based Education

Angus M. Cantwell

University of Rhode Island

Contents

Abstract

Recent government-backed programs such as Race to the Top and No Child Left Behind have increased competition in schools in an effort to improve student and teacher performance. However, these programs have not had as drastic an impact as many had hoped, and the United States continues to toil in the middle of the pack educationally when compared with the rest of the world.

As many students have continued to struggle in school, many different ideas have been introduced into different levels of the education system in an attempt to raise scores and boost performance. One such idea is competency-based education (CBE), which is an alternative to the traditional time-based system of public education. Rather than receiving a diploma for completing four years of high school, CBE focuses on individualization for students. Semester-long and year-long classes are replaced with a list of competencies in which students must demonstrate mastery in order to earn their diplomas.

As with any other educational concept, there is just as much criticism toward CBE as there is praise. Through a literature review, I aim to describe the benefits and drawbacks of the CBE system. I lay out the advantages CBE has that the current education system lacks while simultaneously pointing out potential flaws. In addition, student and teacher survey results from a local high school are analyzed to help determine the pros and cons of the current education system. The analysis aims to overview both students' and teachers' receptiveness to a possible shift toward CBE. The Institutional Review Board process is also explained to display the process of getting into a school to do field work. With all of the aforementioned information being pulled together, a final letter to the high school's principal and superintendent is created which outlines the final synthesis and analysis of the data. Policy recommendations are made in

an attempt to help the school achieve future success.

It remains largely unknown whether CBE could make a lasting positive impact on high school students. However, by extrapolating from the data presented, it is possible to begin to draw a picture of the current state of affairs as well as the possible implications and changes of a CBE system.

Literature Review

      The American Education system has been under the microscope for years. Teachers, parents, and students have voiced concerns about its quality and direction. Some people, such as Finnish educator and scholar Pasi Sahlberg (2012), have argued that programs such as President Bush's "No Child Left Behind" and President Obama's "Race to the Top" have instilled a competitive atmosphere within education that is "creating incentives for teachers to ignore those who need help the most" (92). The mixed reviews surrounding these programs have led many parents, teachers, and policymakers to continue searching for other solutions to the United States' problems in education.

      One possible alternative to the current education system is the increased use of Competency-Based Education (CBE). In a CBE system, students are given a pre-determined level of competency which they are expected to achieve in specific topic areas, which means that they compete against a standard rather than their classmates (Ainsworth, 1977). This system's hallmark is its individuality; students have a group of compulsory competencies to complete, after which they can choose others that interest them as electives. In addition, students can complete competencies at their own pace, allowing them to structure their own schedules as they see fit. In Finland, where individualized learning is the standard, semesters have been replaced by five or six periods each school year, meaning that school is broken down into 6- or 7-week blocks during which students work toward mastery in their subjects (Sahlberg, 2012).

      One of the benefits of such a system is the flexibility it offers in terms of graduation time. According to Sahlberg (2012), "Because personalized learning plans in upper-secondary school are not tied to age groups or classes, some students will take more time to complete their studies than others" (29). Students who successfully test out of certain competencies or take on extra

work can condense the necessary material into a three-year period. At the same time, those students who struggle academically or choose to take a job to help support their family can take an extra year to graduate without feeling ashamed. In addition, students in a CBE setting are grouped not by age but by competency in each subject field, which reduces the stigma or humiliation that can accompany students who would otherwise be taking a class designed for younger students (Tyo, 1979).

The current job market is rapidly shifting. Traditional, well-defined job positions that remain static have been replaced by ones that require continuous adaptation and rapid change (Lawler III, 1993). For this reason, a company's competitive advantage may be dependent on its ability to hire the best prospective workers rather than only focusing on job descriptions. Students currently coming out of high school or college don't always have the skills to complete the necessary tasks in these new positions. Colleges are increasingly adding remedial courses for recent high school graduates who are still struggling with reading, writing and mathematics (Rickover, 1979).

CBE is currently used primarily in college settings. However, with this lack of preparedness, as well as the current high school drop-out rate, CBE could be a possible method of turning schools and students around. Our current system is based on numerous standardized tests, which has led to a more general curriculum. More material is covered, but at the expense of detail. In addition, what is currently taught in the classroom is often mismatched with what is tested in achievement tests. Switching to "criterion-referenced tests" would allow teachers to go into more depth with certain material (Tyo, 1979). They would also be able to tailor the work to the needs of students rather than the standardized test material.

CBE could be of particular use in narrowing the achievement gap between white and

minority students. In remedial classes, minority students are disproportionately represented. This leads to an internalization of the idea that race and educational ability are interrelated (Noguera, 2009). Minority group leaders have endorsed CBE as a way to help all children get a fair education, as they believe it takes at least some of the subjectivity and stereotyping out of the educational equation (Rickover, 1979).

One of the most difficult aspects of a CBE program is creating the curriculum. There are often disagreements regarding how certain topics should be taught, and at the high school level there is still disagreement over what a competent graduate should be able to do (Abramowitz, 1980; Tompkins, Laslovich & Greene, 1996). Once competencies have been agreed upon, setting the level of mastery for each is often arbitrary and subjective (Abramowitz, 1980). Once the bar for mastery has been set, students may also be tempted to aim for that goal rather than expending all of their energy to do as well as possible (Abramowitz, 1980). To that end, critics of CBE have argued that it promotes mediocrity rather than excellence in schools (Ainsworth; Abramowitz, 1980; Ainsworth, 1977). According to Ainsworth (1977), "It is frustrating for an instructor to come upon excellent work and be unable to recognize its excellence in a formal way" (328). One way of combating this, according to Tyo (1979), would be the implementation of different competencies for high-achieving students that would be more rigorous than those of most students.

In addition, some subject areas lend themselves to CBE more than others. While multiplication tables or word skills can be easily fit into a CBE plan, social or emotional topics can be much more challenging to quantify (Palardy & Eisele, 1972). Additionally, creativity and innovation can be brushed aside when ends are determined before the means (Auerbach, 1986). Incorporating CBE into subjects such as foreign languages could be particularly difficult because

it focuses on precision. Students and teachers may not know how best to conduct class in a CBE setting, since foreign language classes are based on risk-taking and a willingness to make mistakes (Auerbach, 1986). Much like NCLB forces teachers into a corner regarding their curricula, CBE likewise has the potential to limit the creative process within a classroom.

Additionally, determining who creates the competencies is a point of debate. Critics of CBE have argued that teachers often don't have the time to independently create learning objectives, but also lose autonomy if the objectives are pre-established externally (Palardy and Eisele, 1972). Tyo (1979) argues that learning and achievement centers could be used to take some of the responsibilities of achievement certification away from the teachers; whether this would have beneficial or detrimental consequences is currently undetermined.

One major hurdle in implementing CBE is the political pressure that would result. Since setting the level of mastery is arbitrary, as is the determination of mastery, some teachers or competencies may have higher cut-off points. When this happens, fewer students would achieve mastery, leading to a public outcry and increased school budgets to educate those students who are not achieving competencies (Abramowitz, 1980). This would in turn create financial and political conflicts, which could undermine the system.

Despite being one of the wealthiest nations in the world, the United States is consistently mediocre by most educational measures. In order to rise to the top, some fundamental changes need to take place. Could CBE be one of those changes? It offers a more individualized learning plan for students, and shifts the focus of education away from competition and instead toward cooperation. It could also combat the educational inequality that plagues the country while perhaps better preparing students for the modern job market. At the same time, there is a lack of consensus regarding who would create the competencies, and students may decide to work for

the minimum standard rather than provide their best work. Without concrete evidence from high schools, it will be difficult to definitively state whether or not CBE is an effective alternative to the current education system. In order to obtain some of that evidence, I have conducted a study within an American high school to gauge students' and teachers' feelings, beliefs, and experiences within the current system, as well as their interest in a CBE system. The results of this study will hopefully shed more light on the issue at hand while helping to determine whether this alternative would be both feasible and beneficial.

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Institutional Review Board Application

University of Rhode Island
Institutional Review Board (IRB)

IRB ID No. _____(Internal Use Only)

Part 1. Project Identification

1.1 Review Requested – Choose One: (See URI IRB Policy and Procedures for guidance)

A X **Full Board b. Expedited Review c. Exempt Review - Category #_____**

1.2 Project Title (Project title must match grant title. If different, also provide grant title):

Competency-Based Education in Public High Schools

1.3 Project Duration:

Start Date: Upon IRB Approval	**End Date:** 5/14/2014

1.4 Principal Investigator (PI)

Name:	
Diane Kern	
Mailing Address:	**Phone Number:**
URI School of Education, 708 Chafee Hall, Kingston RI 02881	(401) 874-9490
Email:	**Fax:**

dkern@uri.edu	
University Department: Education	**College:** University of Rhode Island
Occupational Position at URI: X Faculty Staff Other: _____	

1.5 Co-Investigator (Students cannot be co-investigators):

Name:	
Mailing Address:	**Phone Number:**
Email:	**Fax:**
University Department:	**College:**
Occupational Position at URI: Faculty Staff Other: _____	

1.6 Student Investigator

Name
Angus Cantwell

Local Mailing Address 575 Fletcher Road, North Kingstown, RI 02852	**Phone Number:** (401) 284-6214
Permanent Mailing Address (if different)	**Fax:**
Email: Angus_cantwell@my.uri.edu	
University Department: Education/Honors Program	**College:** University of Rhode Island
Dissertation/Thesis Proposal: Yes No X **IF YES, please submit thesis or dissertation proposal with this IRB Application Form**	

1.7 Key Personnel - Other people engaged in the study who have access to identifiable information about subjects (i.e. enroll participants, conduct consent process, collect or review identifiable information, or conduct intervention activities):

Name	Position	Role on study

1.8 Training in Responsible Conduct of Research With Human Subjects

Have all study investigators and other key personnel completed training in the responsible conduct of research with human subjects within the past three years?

YES X

NO

1.9 Funding

A. Will this be an externally funded project?

YES

NO X

1.10 Collaborating Institutions and Investigators

A. Does the research involve a collaborating agency, institution, school district or other organization (entity)?

YES X

NO

IF YES, please complete the following:

A1. List all collaborating entities.

North Kingstown High School

A2. Does each collaborating entity have a Federalwide Assurance?

YES

NO X

A3. If yes, please provide the Federalwide Assurance Number(s) of each collaborating entity.

A4. For each collaborating entity, a copy of a letter of agreement to participate in the research (on letterhead) is required. If the collaborating entity has an IRB, a copy of that entity's IRB approval is required. Please include all necessary documentation with the submission of this IRB APPLICATION form.

B. Does the project involve one or more independent investigators who are not formally affiliated with the URI or another institution with a Federalwide Assurance (FWA)?

YES

NO X

Part 2. Summary of Activities

You may copy and paste information from your proposal or consent, if appropriate, in response to any of these questions.

2.1 Briefly describe the research study design, providing a short overview using layman's terms:

The humiliating stigma that is attached to students who don't graduate high school within four years causes many to drop out of school rather than facing a fifth year. At the same time, many students become bored or complacent because course material is not rigorous enough. In order to amend both of these issues, I am going to explore the possibility of implementing

a Competency-Based Education (CBE) program in public high schools. This would replace the traditional time requirements of high school with an expansive list of competencies needed in order to earn a diploma, allowing students to work at a pace that is most comfortable for them.

The project will be broken into two separate parts. A literature review will be conducted based on a number of books and journal articles detailing the pros and cons of a CBE plan. Additionally, surveys and interviews will be conducted at a high school in Rhode Island to gauge student and teacher beliefs toward the current education system compared to this possible change to CBE. Finally, based on the synthesis of the data, a letter to the school's principal and superintendent will be written detailing the findings of this study.

2.2 Describe the tasks research subjects will be asked to perform. Attach surveys, instruments, interview questions, focus group questions, etc. Describe the frequency and duration of procedures, tests, and experiments.

Students will be asked to complete a survey which will ask them questions about their feelings and experiences regarding public education, particularly high school. Additionally, a student focus group will be created which will consist of students who volunteer to participate. Teachers in each class will be asked to alert them if they have an interest in participating. Once the focus group has been created, participating students will meet with me during the lunch period after all surveys have been collected.

Teachers will also be asked to complete a similar survey, after which I will go into the lunchrooms of both English and History teachers and ask for volunteers for a separate teacher focus group. Once participants have been selected, I will conduct another focus group with those teachers, also during a lunch period.

2.3 Provide a full description of risks and measures to minimize risks. Include risk of psychosocial harm (emotional distress, embarrassment), economic harm (e.g., loss of employment or insurability, loss of professional standing or reputation, loss of standing within a community), and legal jeopardy. Describe what will be done to minimize those risks.

Some subjects, primarily students, may feel embarrassed when answering certain questions on the survey. Additionally, some teachers may wish to speak negatively about the current education system but fear being reprimanded. All surveys will be completely confidential, and any data received from interviews will be cited in a way that in no way describes any interviewees. Additionally, any student or teacher who wants to do an interview but does not want to participate in a focus group can choose to meet one-on-one instead.

2.4 Describe any potential for direct benefit to individual subjects, as well as the benefit to society based on scientific knowledge to be gained; these should be clearly distinguished. Monetary payment or other compensation is not considered a benefit.

Subjects will not receive any direct benefits from this study. However, subjects will develop an understanding of possible alternatives to their current school system, which could give them more of a voice in terms of their own education.

2.5 Does the research involve (Check all that apply):

Use of private records (e.g. medical, educational financial)

Possible invasion of privacy of subject or subject's family

Deception

Deprivation of physiological requirements such as sleep or food

Surveys requesting disclosure of sensitive information or illegal activities

Diet and exercise interventions

Presentations of materials that might cause stress to a particular population

Infectious or hazardous materials

Risks to job security or financial stability

Invasive medical procedures other than blood draws

Blood draws

Investigational New Drug

Investigational New Device

Other (please describe)

Part 3. Characteristics of the Subject Population and Location of Study

3.1 Expected total maximum number of subjects: 150

3.2 Expected age range of subjects:

13-18 for students; 25-70 for teachers

3.3 Briefly describe the subject population. Specify number, sex, ethnicity, race and age. Justify exclusion of any group, especially by criteria based on gender, ethnicity, race or age.

My subject population will include two separate groups. The student population will consist of students in high school, aged 13-18. Surveys will be distributed to approximately 150 students, with all ethnicities and genders being included. The teachers being surveyed and interviewed will be anywhere from 25-70 years old; between 30 and 40 teachers will be given surveys in total. However, I will exclude those teachers without at least 3 years of teaching experience in order to ensure that they have experience with our current education system. Again, all genders and ethnicities will be included.

3.4 Vulnerable populations to be recruited for this project (Check all that apply):

X Children (17 or under)	URI Students	Decisionally impaired
Prisoners	URI employees	Frail elderly
Pregnant Women	Employees of Researcher	Other:_____

3.5 Describe the location(s) where subject recruitment will take place (e.g. university,

agency, hospital, shopping mall)?

North Kingstown High School

Part 4. Recruitment and Informed Consent Process

4.1 Describe the recruitment process, being sure to explain who will approach potential subjects and how the privacy of potential subjects will be protected. Describe any incentives or inducements that will be offered. List all recruitment materials to be used (e.g. advertisements, bulletin board notices, emails, letters, phone scripts, or URLs) and attach copies to this form:

The recruitment process will take place during school hours. I will personally go into all participating classrooms and give a very brief description of who I am, what I'm doing, and what I'm asking students to do. Students will be given parental consent forms to be brought home, read, signed, and returned. Their names will not be attached to the surveys in any way, so I will not be able to identify any individual students. My recruitment will take place entirely through speaking with teachers about coming into their classrooms.

Teachers will be recruited during their lunch breaks. English and History teachers are in separate rooms during lunch, so I will go into each and give the same short talk to each group. They will then be given teacher consent forms, to be brought home and signed as well.

4.2 Principal investigators are responsible to see that reasonable steps are taken to ensure that subjects are fully informed and understand the study. Considering that consent involves a process of communication in addition to use of a consent form, describe how you plan to consent your subjects.

I plan to consent my subjects by fully informing them in-person of my research plan, goals, and expectations. I will explain the possible implications of their assistance to the students as a class, focusing on their ability to have their voices be heard regarding their own education. While the recruitment process will take place as a group, I will encourage them to speak with me individually if they wish.

Teachers will be recruited as a group during their lunch break. I will conduct this in the same manner, letting them know that they can discuss any concerns or questions individually if they wish.

4.3 If any potential participants could have limited decision-making capacity, language barriers or hearing difficulty, describe how capacity to consent will be assessed.

The capacity for students to consent will be based entirely on student and parent signatures. Without signatures on both forms (which will each detail exactly what is expected of them), they will not be asked to do anything for this study.

4.4 If your study population includes a substantial number of people who speak a foreign language, a consent form should be provided in translation. Please provide the name/credentials of the person who will do the translations.

Not Applicable.

4.5 Parent/Guardian Consent and Assent – If enrolling children, describe how

 parent(s) or guardian(s) will provide consent and how child will provide assent.

Students will be given parent consent forms in school to be brought home and signed. Students will be given one week to have the forms completed and brought back in to school, where teachers will collect them and bring them to me independently.

 4.6 Waiver or alteration of consent: The IRB may approve waiver or alteration of one or more of the elements of consent in some minimal risk studies. Do you plan to request one of the following:

Waiver of signed consent form

Alteration of consent (i.e. deception)

Waiver of any other elements of informed consent , or entire consent

If so, please explain why the study is considered to be of minimal risk and why the waiver would be necessary to conduct the research:

Part 5. Privacy and Confidentiality

5.1 Describe any links between data collected and subject identity. Examples of links include names, addresses, telephone numbers, etc.

With the exception of the signed assent forms, data will have no identifying information written anywhere. Assent and consent forms will provide identifying information. I will assign pseudonyms to each interview participant and no grade level will be assigned to ensure teachers and students are not identifiable. The researcher will create a code system (not using any personal or identifiable information) to link participants' survey and interview information. The researcher will be the only one with access to this code system.

5.2 Describe the provisions made to maintain anonymity and/or confidentiality of data collected, including assignment of identification numbers, coding systems, etc.

Assent and consent forms will provide identifying information. Other than these, students will have no identifying information anywhere with regards to the survey. They will be done confidentially, then collected by the teacher before being handed to me outside of the classroom. Similarly, I will ask teachers to turn in surveys to one specific teacher, who will then give me the entire set once completed. I will know only the names of those who I interview, and that information will not show up anywhere in my final research paper and letter to the principal and superintendent. Pseudonyms will be used that are in no way associated with the actual participants (same first letter in name, etc.).

5.3 Where, how long, and in what format (such as paper, digital or electronic media, video, audio,

or photographic) will data be kept? Include details about where data will be stored (address), how it will be secured and who will have access to the data. For example, storage and security methods can include such methods as locked cabinets, password protection, encryption, firewalls, etc.

Data will be stored in Dr. Diane Kern's URI office in 708 Chafee Hall, Kingston, RI within a locked room and filing cabinet that only Dr. Kern has access to. Data will be saved for three years after the study is completed and then shredded and discarded.

5.4 Is Investigator requesting authorization for use and disclosure of Protected Health Information (PHI) from a covered entity? (Ex. Hospital, pharmacy, physician office)

YES

NO X

5.5 Is Investigator requesting waiver of authorization for use and disclosure of PHI?

YES

NO X

5.6 Describe how the results of this research will be publicly disseminated (e.g. thesis, dissertation, publication, presentation that is not internal):

The results of this research will be disseminated in a final presentation to be given at the University of Rhode Island in May for the Honors Program. In addition, a letter to the high school's principal and superintendent will be written to share study findings and recommendations.

Part 6. Conflict of Interest

A conflict of interest may exist whenever financial considerations or publication rights have the potential to compromise or have the appearance of compromising one's professional judgment and independence in the design, conduct or publication of research.

The IRB considers the investigator's financial interests when evaluating the protection of human subjects. If a financial interest is reported, the IRB will assess the investigator's objectivity in:

- Communicating risks
- Selecting subjects

- Promoting informed consent
- Gathering, analyzing and reporting data

6.1 In the space below, identify whether you (including your spouse or dependent child) or any key person affiliated with the project has any financial interest, financial relationship, governance or administrative affiliation with any entity that is providing funds for or which has rights to intellectual property resulting from this study.

No

6.2 Does this study evaluate a drug, a device, a test for disease, or a product?

YES

NO X

6.3 Are you serving as a paid consultant or speaker on behalf of the sponsor of your research?
 YES

 NO X

Part 7. Assurance Statement

I CERTIFY as follows concerning the above named research proposal:

I have read and am familiar with the University of Rhode Island's "Policies and Procedures Manual for Human Subject Protection."

The rights and welfare of the subjects will be adequately protected.

Risks or discomfort (if any) to subject(s) have been clearly indicated and it has been shown how they are outweighed by potential benefits to the subject or by the importance of the knowledge to be gained.

The informed consent of subjects will be obtained by appropriate methods that meet the requirements of the University's general assurance procedures.

Any proposed changes in research activity will be reported to the IRB.   Those changes may not be initiated without IRB review and approval except where necessary to eliminate apparent immediate hazard to the subjects. Any changes relating to Part 6, Conflict of Interest, will be reported immediately to the Office of Research Compliance.

Any unanticipated problems involving risks to human subjects or others will be reported to the IRB immediately.

The Principal Investigator certifies that he/she has reviewed this IRB Application and ensured that all materials follow the instructions and checklists (see Pages 1-4) developed by the University of Rhode Island Institutional Review Board. The Principal Investigator acknowledges responsibility for the work of student investigators that he/she supervises.

Student Survey

Thank you for taking this survey! All responses will be kept confidential. Your ideas about high school education are very helpful. This survey should take about 5-10 minutes.

Directions: Please select only one response for each item. You may also skip an item if you choose.

1) Are you a male or a female student?

   Male

   Female

1) What grade are you in?

   Nine

   Ten

   Eleven

   Twelve

2) Generally, which types of classes are you enrolled in?

   AP/Honors

   Mostly Honors

   Mostly CP

   Mostly workshops

3) What is your average grade in class?

   Straight As

   Mostly As and Bs

   Mostly Cs and Ds

   Mostly Ds and Fs

4) How difficult do you find most of your classes?

   Very difficult

Fairly difficult

Not very difficult

Not difficult at all

5) How true is the following statement to you: I put a lot of effort into my classwork.

Very true

Mostly true

Somewhat true

Not very true

Not true at all

6) Do teachers give you or other students individual help during class when necessary?

Always

Often

Sometimes

Occasionally

Rarely/never

7) How much do you enjoy school?

Very much

Somewhat

Neutral

Not very much

Not at all

8) Do you know anyone who has dropped out? If so, please specify how many students.

Yes, _____

No

9) Have you seriously considered dropping out?

Yes

No

10) Considering the classwork associated with each class, do you feel that four years is a fair amount of time to finish high school?

Yes; it's a fair amount of time and work

No; I would prefer to condense the material into a three-year plan

No; I would prefer to spread the material over a five-year plan

11) How true is the following statement to you: I feel like I need to spend more time and effort in certain subject areas more than others.

Very true

Mostly true

Somewhat true

Not very true

Not true at all

12) Do you have classes with students outside of your grade level? If so, which class(es)?

Yes, _____

No

13) How true is the following statement to you: I would have no problem taking classes with students in other grades?

Very true

Mostly true

Somewhat true

Not very true

Not true at all

14) How true is the following statement to you: I have truly learned and retained most of what I've been taught in school.

Very true

Mostly true

Somewhat true

Not very true

Not true at all

15) Do you believe classroom assessments cover the most important parts of each class?

Always

Most of the time

Sometimes

Rarely

Never

16) Some teachers tend to use formal tests to assess student learning, while others use demonstrations (creating a product, executing a specific task) or presentations. What is the most common format for your assessments?

Multiple choice

Essay

True/False

Demonstration

Presentation

17) Which assessment format do you prefer?

Multiple choice

Essay

True/False

Short answer

Demonstration

Presentation

18) Generally, how many times are you asked to demonstrate your proficiency in a topic (Ex.: creating something, taking an oral exam, preparing a presentation)?

Almost always

Often

Sometimes

Occasionally

Rarely/Never

19) Compared to traditional test methods, what is your opinion of these alternative assessments?

Love them

Like them

Neutral

Dislike them

Hate them

20) How true is the following statement to you: I feel that I am or will be adequately prepared for college/work/military upon graduation.

Very true

Mostly true

Somewhat true

Not very true

Not true at all

21) A Competency-Based Education (CBE) plan would replace the traditional four-year time-based graduation requirement with a list of competencies which would need to be mastered prior to graduation. Students would work to reach a pre-determined benchmark, and would be asked to explicitly demonstrate proficiency through appropriate assessment methods. Considering this and the current education system, which system do you think you would prefer, and why?

_____

_____

_____

_____

Teacher Survey

Thank you for taking this survey! All responses will be kept confidential. Your ideas about high school education are very helpful. This survey should take about 5-10 minutes.

Directions: Please select only one response for each item. You may also skip an item if you choose.

1) How long have you been teaching? _____

2) In which department do you teach?
English
History
Math
Science
Foreign Language

3) What level do you generally teach?
Mostly AP/Honors
Mostly Honors
Mostly CP
Mostly Workshops
Mostly Success Academy
Other _____

4) Which grade level(s) do you teach? Check all that apply. If classes have a mix of grade level, select the choice which best represents the class.
Nine
Ten
Eleven
Twelve

5) If you teach any classes which mix grade levels, please specify which classes.

   Yes, _____

   No

6) How true is the following statement to you: students in my classes generally seem excited and engaged during class time.

   Very true

   Mostly true

   Somewhat true

   Not very true

   Not true at all

7) How much effort do students put into course work?

   A lot of effort

   A decent amount of effort

   Not a lot of effort

   Very little/no effort

8) Have you noticed an "effort gap" between different tracking levels?

   Yes; very noticeable

   Yes; not very noticeable

   No

   Not applicable

9) Is certain students are struggling in one of your classes, are you able to give them individual attention in-class to help them understand the material?

   Always

   Often

   Sometimes

   Occasionally

   Rarely/never

10) How often are multiple students absent from class without an excuse?

Very often

Fairly often

Sometimes

Rarely

Never

11) How true is the following statement to you: I feel standardized tests accurately represent student abilities.

Very true

Mostly true

Somewhat true

Not very true

Not true at all

12) Which type of assessment do you use the most in your classes?

Multiple choice

Essay/short answer

Presentation

Demonstration (creating a product, executing a specific task, etc.)

Other _____

13) Which type of assessment do you believe best exhibits students' understanding of a topic?

Multiple choice

Essay/short answer

Presentation

Demonstration

14) How often do you have students demonstrate proficiencies as an assessment (Ex.: Preparing presentations, creating something, or giving an oral exam)?

All the time

Often

Sometimes

Occasionally

Rarely/never

15) If given the opportunity, how often do you think you would be able to assess student learning by asking them to demonstrate specific proficiencies in class?

Almost always

Most of the time

Sometimes

Not very often

Rarely/never

16) How true is the following statement to you: I am confident that the majority of my students truly understand and can retain the information in most of my classes.

Very true

Mostly true

Somewhat true

Not very true

Not true at all

17) How true is the following statement to you: I feel constrained in terms of my lesson plans and assessment methods due to curriculum requirements or testing.

Very true

Mostly true

Somewhat true

Not very true

Not true at all

18) How true is the following statement to you: I have a high level of autonomy in creating my lesson plans.

Very true

Mostly true

Somewhat true

Not very true

Not true at all

19) Do you feel students are generally more interested in competition or cooperation in terms of school success and achievement?

Solely competition

Mostly competition

Both

Mostly cooperation

Solely cooperation

20) If students were given more autonomy in the types of classes they were able to take each year, what impact do you think it would have and why?

Positive

Negative

_____

_____

_____

_____

20) A Competency-Based Education (CBE) plan would replace the traditional four-year time-based graduation requirement with a list of competencies which would need to be mastered prior to graduation. Students would work to reach a pre-determined benchmark, and would be asked to explicitly demonstrate proficiency through appropriate assessment methods. Considering this and the current education system, which system do you think you would prefer, and why?

_____

_____

_____

Survey Data Analysis

Before looking at the data, I'd like to briefly discuss my research methods for this project. Due to time constraints, I had to delete the interview portion of my study. However, I was able to distribute surveys in my school. I asked both History and English teachers to participate. In addition, I went to four English classrooms: a freshman College Prep class, a 10th grade reading/writing workshop class, a 12th grade College Prep class, and a 12th grade Advanced Placement class. I did this hoping to get a fairly even distribution of both grade and tracking levels; however, as you will soon see, this did not work as planned.

After collecting surveys from both students and teachers, I met with Prof. Doerner, who helped me organize my thoughts and figure out the best way to arrange the data. I used excel sheets to record responses to each question, and by coding Likert scale answers (usually 0 to 4) I was able to calculate averages for most questions. Once the data had been inputted and calculated, I began looking for trends. Unfortunately, I only received 11 teacher surveys, which made trends difficult to find. However, I did have a few interesting findings from the 26 student surveys I received:

Education System Preference
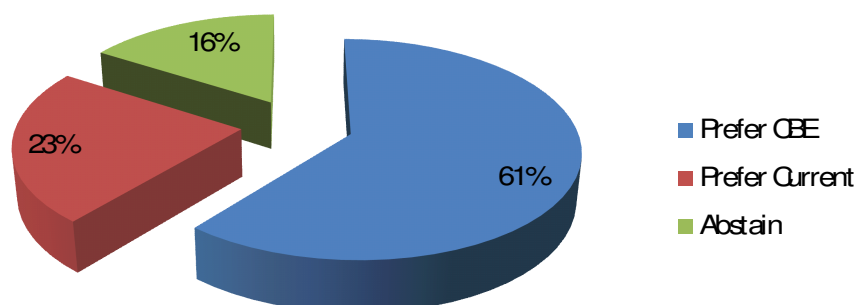
- 65% of females (11/17) were in favor of CBE, while only 55% (5/9) males agreed

- 65% of students in grades 10 and 12 (13/20) would prefer CBE, while only 50% (3/6) students in grade 9 agree

- 69% (11/16) of students in mostly College Prep classes would prefer CBE, while just 13% (2/16) would prefer the current system

    - Students in mostly Honors/Advanced Placement classes are split evenly at 45% (5/11) for both CBE and the current system

The statistic that stood out to me the most was the discrepancy between students in different tracking levels. Based on both the multiple choice and short answer questions, it seems that students in College Prep classes want more autonomy, while the Honors and Advanced Placement students are fine with the current, more structured system. I found this interesting because it showed the gap in school perception between students. I also found it particularly note-worthy that more students past grade 9 were in favor of CBE. There are a number of factors

that could have contributed to this number, but I believe it may have to do at least in part to students' desire for change over time.

I was fascinated by the teachers' variety of responses regarding CBE. Though I didn't have enough surveys to display any trends, it is important to note that three survey participants were in favor, four preferred the current system, and four were unsure of which they would prefer. I thought this alone was important, as it showed the wide array of teaching styles and beliefs that are held in the school. Some argued that allowing students to choose career paths would be beneficial, while others argued the polar opposite. Their responses showed that there is no one way to learn or to teach.

As stated before, I did have a number of roadblocks that prevented me from getting as much data as I would have liked. In addition to having low totals, I ran into a few other issues. As expected, my return rate for surveys was mediocre. However, I was disappointed that teacher return rates were barely higher than student return rates:

Survey Return Rate
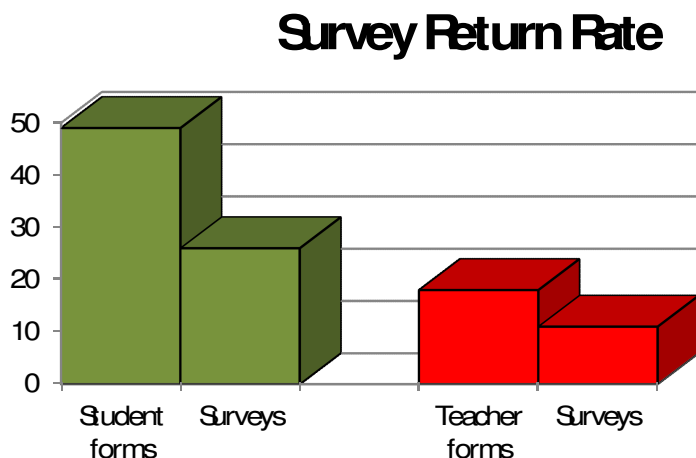
I expected most, if not all, teachers to return the surveys with a lot to say. However, many

chose not to do it. In retrospect, I should have reached out to more than just two departments in order to get a higher number of responses. In addition, it is absolutely possible that the data I received was skewed because math, science, and foreign language teachers' views are not represented.

My other concern is with respect to the student surveys. I had hoped to get a fairly even distribution of grade levels, but unfortunately I ended up with mostly 12th grade students. Once I received surveys and began looking at the data, I quickly realized the most likely cause: students under 18 had to have their parents sign a form, while those who were 18 did not. This made it easier for them to complete the survey. Again, allowing students more time to return forms and complete the surveys could have been beneficial.

Overall, I am excited about the work I did. I gathered some interesting data, and was able to draw some conclusions and make inferences with the responses I received. While a larger, more comprehensive survey would offer more credible results, I believe this was a fairly successful first attempt; it taught me a lot about the research process. I learned how to go about the research process, from the long Institutional Review Board proposal to the data analysis and table-creating. I anticipated even more support for CBE from the student side, but was pleasantly surprised at the number of well-constructed concerns regarding the system. However, from both students and teachers it is clear that some sort of change would be universally accepted at the high school.

__Final Letter__

150 Fairway Drive
North Kingstown, RI 02852

May 9, 2014

Dr. Thomas Kenworthy
150 Fairway Drive
North Kingstown, RI 02852

Dear Dr. Kenworthy:

My name is Gus Cantwell. I am a senior at the University of Rhode Island who is part of the Honors Program. Over the last semester I have been working on my senior honors project. My project explores the possibility of instituting a competency-based education (CBE) plan into a public high school.

A CBE plan would replace the current four-year, time-based model of graduating high school. Rather than compete with other students in the classroom, a set of competencies is created for which each has a benchmark for mastery. When students successfully surpass this benchmark, they get credit for that competency. CBE allows students a level of autonomy in choosing which classes they wish to take and when they want to take them. In addition, the material down into smaller parts, called competencies, which allows them to focus on certain topics that would otherwise be brushed over in a normal class. In addition, students gain the ability to learn at their own pace, and can take anywhere from three to five years to graduate.

Of course, CBE does have drawbacks. While certain topics can easily be translated into competencies, such as learning vocabulary words or multiplication tables, topics that are more abstract can be difficult to work with. In addition, classes such as foreign language would provide a challenge, because the class is based on risk-taking in order to learn. Additionally, the administrative aspects of CBE could be a large hurdle- determining who creates the competencies, whether it is the teachers or administration, is a critical component to the plan. Perhaps most importantly, setting a benchmark for mastery would likely cause students to strive for mediocrity rather than excellence.

After analyzing surveys from students, this is what I found:

Education System Preference
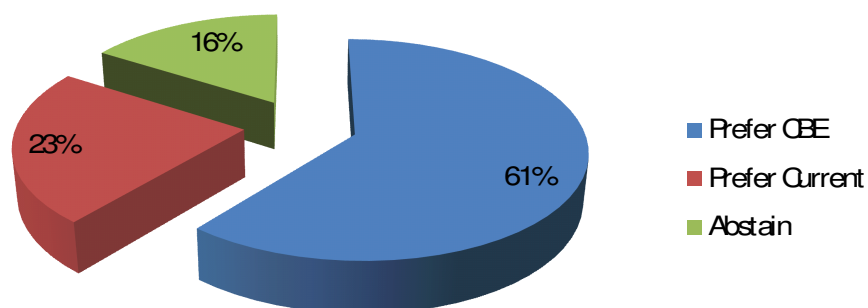
I received 26 student surveys in total. Administrative snags unfortunately limited my sample size. Interestingly, nearly 70% of students who reported taking mostly College Preparatory classes preferred CBE, while only 45% of those who reported taking mostly Honors or Advanced Placed courses agreed. In addition, 65% of students in grades 10 or 12 were in favor of switching to CBE, as opposed to 50% of students in grade 9. It seems that new high school students enjoy the structure of the current system, while those who have become accustomed to it might be ready for a change.

I only received 11 teacher surveys, but their short answer responses were fascinating. Some said that students should be able to begin planning a career path in high school and that student engagement would increase due to higher interest in classwork. However, others argued that such autonomy would not benefit students, but would instead lead them to pick classes that were easy. Additionally, both students and teachers agreed that education is about more than just the school work- peer bonding and informal interactions outside of the class are also important.

I believe guidance counseling should be more individualized and frequent for each student. Students and counselors should all be required to meet one-on-one multiple times during the year to discuss classes and subjects that students enjoy or dislike. Students should also be informed of possible career choices in the areas that they prefer. This will help students transition into high school during their freshman year, and will also guide them through their final years as they approach the next stage of their lives.

I also think consideration should be given to the idea of allowing students more autonomy to choose when they would like to take more of their classes. Doing so may keep them interested in their own learning while eliminating the notion that all students have to take certain classes in specific grades, helping to mix grades. This could reduce the humiliation for students who failed

a class and would otherwise be repeating it with a group of students who are a year behind them.

While a transition to CBE would perhaps be too drastic, some of its pieces have merit and deserve some attention. However, more work still needs to be done on this topic to fully understand the benefits and disadvantages of a CBE system in a high school setting. I would like to thank you for allowing me the opportunity to learn the foundations of educational research and work in North Kingstown High School.

Sincerely Yours,

Angus "Gus" Cantwell

(401) 284-6214
gus.cantwell@gmail.com

cc: Dr. Phil Auger, NKSD