Abstract of Capstone

Lowell Shawn Thornbury

The Graduate School
Morehead State University
April 5, 2013
DEVELOPMENT OF A MIDDLE TO HIGH SCHOOL
COLLEGE AND CAREER READINESS TOOL AND PROFESSIONAL
DEVELOPMENT
FOR A NORTHEASTERN KENTUCKY SCHOOL COMMUNITY

Abstract of capstone

A capstone submitted in partial fulfillment of the
Requirements for the degree of Doctor of Education in the
College of Education
At Morehead State University

By
Lowell Shawn Thornbury
Ashland, Kentucky

Committee Chair: Dr. Sam Wright, Associate Professor, PhD
Morehead, KY
April 5, 2013

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ABSTRACT OF CAPSTONE

DEVELOPMENT OF A MIDDLE TO HIGH SCHOOL COLLEGE AND CAREER READINESS TOOL AND PROFESSIONAL DEVELOPMENT FOR A NORTHEASTERN KENTUCKY SCHOOL COMMUNITY

With the passage of Senate Bill 1, preparing all students to become college and career ready has now become a mandated focus for all public high schools in Kentucky. Given the new accountability model and a more clearly defined set of learning targets, what must a school do in order to insure that there is an environment where everyone stays sharply focused on the same goals? In Kentucky middle and high schools, those goals are closely linked to ACT’s Educational Planning and Assessment System. The purpose of this project is to develop a web-based resource that can be used by any stakeholder for preparing individual intervention strategies for career or college readiness. These strategies can be of benefit to students from all ability levels who are seeking to meet or exceed benchmark performance on the EXPLORE, PLAN or ACT. Additionally, professional development will be provided to teachers to assist in the use of EPAS data for transitioning students from middle to high school.

KEYWORDS: transitions, career readiness, college readiness, EXPLORE, PLAN
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Dedication

This capstone is dedicated to all of those who have supported my educational pursuits over the last eight years, and to those who have encouraged and influenced my personal drive toward continuous improvement and professional commitment to student success.
ACKNOWLEDGEMENTS

Russ Foster – for the many hours of work and support in helping develop two different web based resources for this capstone.
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Executive Summary
What is the core of the capstone?

The core of this capstone project is middle to high school transitions with a focus on college and career readiness and seeks to remove barriers that might exist with accessibility to college and career readiness data for teachers and students. It also seeks to increase awareness of benchmark targets as well as grade level, class, and individual student relationship to benchmark targets. Improvement strategies for teachers and students will be provided by the capstone’s resource as well as a vertical alignment of college and career readiness standards and skill progressions, and thereby a means for more intentional data analysis. Specific skills to be targeted for improvement include an understanding of the vital standards for college and career readiness success, a college and career readiness transition process from middle to high school, data analysis, timely intervention as well as curriculum mapping and assessment strategies. The development of this capstone project came as a result of gaps identified in college and career readiness data obtained from 8th grade EXPLORE and 10th grade PLAN assessments, and seeks to provide teachers with a web-based resource that connects assessment results to specific knowledge and skill sets, the ability to target specific areas of strength or weakness that require intervention or curricular alignment and provide a path to becoming college and career ready for all students.
Who is the capstone meant to impact?

This capstone project targets 8th and 9th grade students specifically but has the ability to impact the entire student population of a school community from 7th-12th grade. The research used to support this project focuses on systems thinking, transitions, interventions and small learning communities. Three specific documents are at the core of this capstone and provide a basis for population that are being targeted with this project. ACT’s *The Forgotten Middle: Ensuring that All Students are on Target for College and Career Readiness before High School* (2008), *Staying on Target: The Importance of Monitoring Student Progress toward College and Career Readiness* (2012), and *Making Effective Use of ACT’s Longitudinal Assessment System* (2012) bring together evidence to support this transition initiative for Boyd County Public Schools.

How was the capstone project implemented?

The capstone project, a web resource and accompanying professional development, were constructed based on data obtained from the 2008-2010 longitudinal college and career readiness data that was made available. Starting in the summer of 2012, PDFs were developed by collecting data from multiple sources and compiling them in an easy to access and use format and then made available via the school district’s webpage. Part I of the accompanying professional development was administered to 7th and 8th grade teachers at Boyd County Middle School prior to the start of school and to 9th grade teachers at Boyd County High School during
September of 2012. Part II was administered to 7th and 8th grade teachers at Boyd County Middle School on January 8th, 2013 and for Boyd County High School teachers on January 18th, 2013. Survey data was collected following the part II professional development. Permission for each activity and data collection was approved by both school administrators and through IRB process in October of 2012.

**Why were this capstone and related strategies selected?**

This capstone project includes a literature review of related research and is based on current information focused on systems thinking, transitions, data driven decision making, interventions and small learning communities (Figure 1).

![Diagram](image)

**Figure 1**
When was the capstone implemented?

- 2010-2011: research, data analysis, determination of need
- 2011-2012: creation of 9th grade transition class, review/determine needs (curriculum development), continued data analysis and research
- May 2012 –June 2012: develop PDFs compiling variety of EPAS resources together and establish website to house information
- August 2012 – January 2013: conduct professional developments, activate website, survey stakeholders, and continued data analysis

Impact of the Capstone

The impact of this capstone project can be seen in the survey results collected from both the middle school and high school teachers. The survey was broken down into five areas, each focusing on a core research topic: Systems thinking, transitions, data driven decision making, early intervention, and small learning communities (Appendix 1). Results from the high school and middle school varied in a number of ways. The following is a summary of the survey results by research topic.

Systems Thinking

Results from the high school and middle school closely mirrored one another except for one question. Teachers from both school indicated at ninety to one hundred percent that both schools have a systemic process for addressing career and college readiness, that this systemic process relies on the use of data, that the professional development from this project aided in the development and evolution of a systemic process and that the professional development helped them understand the
need for a systemic process. The one main area of difference was that at the high school roughly seventy two percent of the teachers believed the process to be “teacher initiated” rather than “mandated,” while at the middle school, seventy percent of teachers surveyed indicated that this process was “mandated” rather than “teacher initiated.” These results indicate that at the high school level, addressing career and college readiness is a more ingrained process as opposed to the middle school where this process is directed by school leaders.

Transitions

When looking at the impact that college and career readiness transitions play from middle to high school, survey results also indicated a strong link. Teachers from both schools indicated that there is a transition program that addresses career and college readiness, and that the professional development and Individual Intervention Strategies helped provide a better understanding of the transition process and the career and college readiness standards that transition between the EXPLORE and PLAN. It should also be noted that although both groups see transition as a focus existing in their own schools, twenty-eight and a half percent of high school teachers and forty percent of middle school teachers do not believe that collaboration exists between the two schools.

Data Driven Decisions

The goal for this section of the survey was to find out if data is being used to address career and college readiness at each school. Both groups indicated at one hundred percent that data is used to make educational decisions within their school and to
assist in transitioning students from middle to high school. The main differences seen in the teacher responses was that at the high school, one hundred percent of teachers believed data is being used to make early career and college readiness decisions for students, while at the middle school, only eighty percent responded the same way. In sharper contrast was the use of the Individual Intervention Strategies. One hundred percent of teachers at the high school stated that the Individual Intervention Strategies aided in the process of making career and college readiness decisions for students, and that they had used them with their classes. At the middle school only forty percent of the teachers surveyed indicated that the Individual Intervention Strategies aided in the process of making career and college readiness decisions for students and that they had used them with their classes.

**Early Intervention/RTI**

Both surveyed groups indicated at one hundred percent that there was an early intervention process for addressing career and college readiness, that data was used to build intervention plans for students who did not meet benchmark as they transitioned from middle to high school, and that the Individual Intervention Strategies helped provide an understanding of which career and college readiness standards must be met to reach benchmark. However, once again, the biggest discrepancy appeared when teachers were asked whether they had used the Individual Intervention Strategies to aid in the early intervention process. At the high school, one hundred percent of teachers responded that they had used them, while at the middle school
only forty percent responded that they had used the Individual Intervention Strategies to aid in early intervention.

**Small Learning Communities**

The final key component in how the transition process from middle to high school occurs is the environment in which it takes place. Both groups responded at one hundred percent that small learning communities were used, that they allow for more individualized instruction, and that they served as a place for career and college readiness goals for students to be addressed. However, one hundred percent of high school teachers responded that the Individual Intervention Strategies make it easier to address career and college readiness goals in small learning communities, while only seventy percent responded similarly at the middle school.

**Unintended Impacts**

The purpose behind the creation of this capstone project was to focus on the problems seen in early identification of college and career readiness when transitioning students from middle to high school. However, significant consequences of this project have developed in ways that it was not originally intended. During the process of conducting the professional developments and meeting with district and school administrators, acknowledgements on the usefulness of this capstone outside of the realm of middle to high school transitions has emerged. One of these unintended consequences was the decision to develop the website and documents to support intervention for teachers and students seeking to improve college and career readiness measures beyond 8th and 9th grade. The developed website and resource documents
now provide a framework for improvement for all students as they move beyond the PLAN to the ACT. The availability of this resource has, in turn, allowed for other groups to find a usefulness of the Individual Intervention Strategy reports. One specific group that has used the website and its resources is the Special Education department. Since students who are classified with special needs are provided with frequent updates, evaluations and modified remediation plans, there has emerged a need to connect these remediation plans with the college and career readiness goals of Senate Bill I. As a result, Special Education directors have been able to use the Individual Intervention Strategy reports to provide specific, detailed goals for their students to accomplish en route to working towards meeting benchmark scores. With supported research indicating that early identification plays a greater role in a student’s future success, members of the school district’s special education community have found a way to use this project from 7th all the way to 12th grade.

Limitations of the Study

The potential limitations of this project lie in the how much the tool has been used. For example, use of the Individual Intervention Strategies at the high school was greater than at the middle school as seen in the survey results. High school teachers indicated that using this method made it easier to understand career and college readiness standards, to aid in early intervention and to address career and college readiness goals. At the middle school, there was limited implementation of this capstone project’s method. This could have been as a result of a lack of
institutional leadership on the advocation of its use or lack of teacher time to focus on a method of data analysis that is not specifically prescribed by the institutional leader.

Reflections

Looking back on the implementation of this capstone, there are a number of issues that stand out which are not completely apparent in the data that was collected. First, in discussions that took place with seventh grade teachers, which were not surveyed, it was apparent that EXPLORE data was not being disaggregated by staff and used as means of identifying student or curriculum strengths and weaknesses. This sentiment was also echoed by the school principal. As a result, there is a tremendous amount of pressure being placed on eighth grade teachers to catch all students up who demonstrate below benchmark performance on the EXPLORE, which is taken at the beginning of the eighth grade school year. This is concerning due to the fact that the capstone research indicated that there are vital standards and skills which students must have met by eighth grade in order to continue successfully on a path to being career or college ready. Having school leadership and seventh grade teachers acknowledge that they were not using career and college readiness data to intervene with their students, places an even greater emphasis on the need to use the Individual Intervention Strategies before students reach the eighth grade and therefore it is the recommendation of this capstone project that a district initiative be established that links the career and college readiness standards to current state standards all the way from high school to elementary school, despite where career and
college readiness assessment begins taking place. This K-12 initiative would allow all educators to focus on career and college goals rather than dropping it in the laps of eighth grade teachers and expecting subsequent grade level teachers to play catch-up with students who are failing to demonstrate benchmark performance. A final area of concern that must be noted is the lack of understanding and attention paid to College and Career Readiness data by school leaders. The success and limitations of any project are tied directly to leadership and as a result, the continued impact of this project will rely heavily upon the direction for implementation placed on teachers by school leadership.
Capstone Project
Literature Review

American College Testing (shortened to ACT in 1996) (2011) defines “college readiness” as obtaining all the knowledge and skills needed for a student to take a first year college course without being required to enroll in a non-credit remediation course. In an effort to see that high school students obtain the necessary characteristics of a “ready” graduate, educational professionals have sought ways to accurately measure student college or career readiness levels, and to determine the most successful organizational and instructional models to ensure that preparedness is obtainable prior to graduation (Caperton, 2009). The state of Kentucky has reaffirmed its desire to provide quality education to all students and to guarantee that receiving a high school diploma will allow a student to become successful in college or career of their choice through the passage of Senate Bill 1. An example from Senate Bill 1 that points toward a revitalized commitment aimed at college and career readiness is the adoption of the new Common Core Standards. These standards are the manifestation of a national effort to align high school practices with the demands that students are expected to meet in college or a career (Achieve Inc, 2009). By providing a vertical alignment, anchored by career and college readiness standards, the new Common Core Standards make career and college readiness a K-12 focus and the translation of these standards into instructional practice has created new opportunities for educators to design for students clearer road maps toward “readiness” (Conley, 2011).
Vital Transitions

The importance of a K-12 vertical alignment and the development of vital knowledge and skills sets before students get to high school in order to stay on the right path toward preparedness is discussed in ACT’s The Forgotten Middle: Ensuring that All Students are on Target for College and Career Readiness before High School (2008). Here ACT’s report shows that currently, the height of academic success that students attain by eighth grade plays a larger role on the students’ college and career readiness than anything that happens academically to the student while in high school (2008). More importantly however the report discusses the non-negotiable knowledge and skill set as well as behavioral and emotional characteristics that must be learned or developed by eighth grade, in order to be college ready later in their academic career. Therefore it is necessary to realize that more than academic factors contribute to the readiness of a student. David Conley (2010) echoes this sentiment when he stated that school leaders, teachers and staff need to emphasize those academic factors that are important to get into college, but that focusing on requirements is not enough. Schools also need to socially and emotionally prepare students for college in order for them to develop the needed responsibility necessary for college success. Thus, meeting college requirements and being prepared are two very different things (McCormick, 2011). In addition, knowing that not all students are going to choose the college path upon graduating, educators are forced to create a learning environment whose culture supports an academic, social and emotional drive toward career and college readiness. In Ready for college, ready for work: Same or
different?, ACT has linked both career and college readiness levels to the same knowledge and skill set and demonstrates that even for those students whose post graduation plans may involve the military or a career, it is still imperative that they obtain and be taught the same appropriate, rigorous curriculum as any student who plans to enroll in a post secondary institution (2006). As a result of this common preparatory link between career and college readiness, ACT adds to their definition of “readiness” in Rigor at risk: Reaffirming quality in high school core curriculum by stating that college readiness means the same as workforce readiness (2007). This close link demonstrates the vitality of focusing in on benchmarks as early as 8th grade and ensuring a successful transition as students move into high school. More recent research by ACT has also yielded greater support for early monitoring of college and career readiness preparedness. In Staying on Target: The Importance of Monitoring Student Progress toward College and Career Readiness (2012), beginning this monitoring process in middle school has shown to be associated with increases in career in college and career readiness rates, higher enrollment in college- prep courses, a greater emphasis on education and career planning, increased college enrollment, and educational achievement and persistence.

Systemic Thinking

Constructing a school environment where a college and career ready culture thrives and promotes the importance of giving all students an awareness of and path toward success after high school is a complex task. Research shows that a culture which supports career and college readiness maintains low- dropout rates, high
graduation rates, low retention rates, personalized instruction, small learning communities, a sense that the high school is a supportive environment and a rigorous and relevant curriculum. (Armstead, Bessel. et al., 2010; Dedmond, 2009; Fishcetti & Smith, 2010; Kuo, 2010; Levin, 2010; SREB, 2009). In Long-range Planning Motivates Students & Personalizes Instruction, Dedmond concludes that programs set up to personalize instruction in a way that gives students the opportunity to define themselves and what they will choose to become can have tremendous benefits for the student (2009). These benefits include but are not limited to binding academic rigor with the real world, and therefore helping students understand how to pair up the varying degrees of academic and educational effort to the expectations that they hold for their future lifestyle. As a result, students can make career goals that are viable when considering their strongest attributes. This article supports the notion that pursuing the proper planning model, students can have a role in assessing and determining what would be the best career paths for themselves. The author also notes that students can then determine how much more effort would produce a better future or career possibilities and this causes them to step outside of their comfort zones and perform at a level that they had not previously considered. What seems to really be going on here is that students, on their own, are seeing the connections between academic study, performance and the work force. As ACT has demonstrated (2012) each of these can result from early monitoring.

Individualizing a student's learning can be enhanced by creating a culture where not only the outlined academic path is student-specific, but also where
instruction is provided in the same fashion. This can be achieved through a culture of small learning communities (SLCs). Creating small learning communities means that the environments students are participating and learning in are tailored to their academic goals, levels, and interests. A more common example of a small learning community is the Freshmen Academy. However, it is possible to build SLCs into the academic fabric of a student’s experience, as well. Early college and dual enrollment programs provide similar SLC benefits. Kuo’s (2010) research listed schools that ranged from 600-900 students, career academies, and early college programs as characteristics in schools which are moving through the next phase of successful high school reform. Small learning communities can also exist at any academic level. Kuo also noted that strong early childhood learning programs, such as preschools, typically yield higher graduation rates for the high schools they feed into, thus furthering the idea that college and career readiness is goal that can be targeted anywhere K-12 (2010).

Fischetti and Smith (2010) support the culture of SLCs because they not only are shown to provide the conditions necessary for a thriving career and college readiness culture such as improved attendance and graduation rates but they also build environments founded on support. This is largely a result of the community’s dedication to continued improvement to providing quality instruction, a rigorous but equal set of expectations for all students and the inherent drive to break free from the school’s questionable traditions. Early college programs serve as a means of breaking up the large school by changing the direction that students perceive they are
heading while still in high school. It does this by creating "a college going culture with specific training to prepare for college, a relevant and rigorous curriculum, quality assessment (models) and academic and social support activities" (Fischetti & Smith, 2010, p.262). Berger (2010) looked closely at the impact of early college programs after five years of evaluation and found that:

"programs that allow high school students to take college-level classes for college credits, such as Tech-Prep programs, International Baccalaureate programs, and Middle College high schools, found three primary benefits for students: (a) the opportunity to earn free college credit, (b) gaining "a taste" of college, and (c) increasing students' confidence in their academic abilities" (335).

Levine (2010) also discussed other impacts and challenges seen with a smaller learning communities and college-career ready culture. Levine's research (2010, p.276) showed that "extant research does...suggest that SLCs can improve student attendance, graduation rates, and students' sense of high schools as supportive environments." However, in order for them to reach these intended outcomes, "three key obstacles or challenges for SLCs must be addressed: focusing on instructional improvement, maintaining equity and rigor, and transcending school history" (Levine, 2010, p.276). Without focus on these issues, it is unlikely that SLCs can work effectively. One of the greatest factors in leading to drop-outs among high school students is the lack of connection or relevance between academic study and career goals. The Southern Regional Education Board (SREB) supports this notion as well
through their research and is discussed in the 2009 publication *Ready for Tomorrow: Six Proven Ideas to Graduate and Prepare More Students for College and 21st Century Careers*. Couple this with apathy, the common economic hardship and general poverty experienced in many communities in eastern Kentucky and it is easy to see why students can not envision a way out. Armstead (2010) shows how students distinguished their teachers apart from each other by the way they were creative and this trait itself said something to them about the way certain teachers cared about how they learned. The successful traits of having a supportive environment and breaking free from a school’s history are a testament to the need for new systematic paradigms to be espoused at any school. In addition to SLCs, there are other systematic changes that can occur which could benefit all stakeholders.

Small learning communities that are focused on addressing college and career readiness goals and that provide an opportunity to spend targeted time investigating and making early educational and career decisions would be a fitting place to meet the student improvement objectives of ACT’s longitudinal assessment system (2012). The goal of developing systematic approaches to solving problems is to help create a common language, method, or behavior that becomes an effective and efficient routine. An area where this type of practice is essential is assessment systems. When discussing assessment of career and college readiness in Kentucky, the ACT becomes one of the most important measuring sticks. Starting in eighth grade student begin taking the first assessment in ACT’s EPAS, the EXPLORE. These scores serve as the first measure of how close to the target college and career readiness benchmarks that
a student is by eighth grade. Students do not take another EPAS assessment until 10th grade when they take the PLAN. This gap falls squarely on students during an important transition period for young adults (ACT, 2008). The data from the EXPLORE must be communicated to eighth grade students so that they understand the benchmarks and how it relates to being career and college ready. Likewise, schools must also develop strategies to maintain student focus on career and college readiness during a ninth grade year that is absent of an EPAS measure. The development of a tool which could allow teachers, students, parents, administrators, or counselors to quickly link a student’s EPAS career and college readiness scores to an Individual Intervention Strategy (IIS) could help accomplish these goals.

**Problem Statement**

With the increased focus on career and college readiness for middle and high school students in Kentucky and across the nation, teachers must be able to align curriculum and assessment practices with individual student strengths and weaknesses as indicated by performance at, above or below benchmark. Unfortunately for educators across the nation and in Kentucky, data shows that the majority of high school graduates in the United States are not meeting the designated benchmarks to demonstrate preparedness for college or the workforce. (ACT, 2009, 2011).

**Project Overview**

Through the collection, documentation and input of interpretive data, improvement strategies and the KCAS standards, an electronic program will be
developed that will allow administrators, teachers, parents and students to generate an Individual Intervention Strategy (IIS) – pronounced “ice” – per a student’s EPAS subject scores for the EXPLORE, PLAN, and ACT, with the click of a few buttons.

**Rationale**

The purpose behind this project is to create a college and readiness system tool at Boyd County High School. This would have to be a tool that could assist in solving career and college readiness problems such as decreasing college readiness rates, coupled with a staggering 95% graduation rate, as well as, a lack of teacher, student and parent understanding of college and career readiness. Boyd County High School must create an system that not only gets students a diploma but also provides them with the ability and skills to be successful in life after graduation. It must also help make parents aware of the importance this goal should play in everything their child does while in school. Through the creation of an electronic resource, as well as professional development, parents, teachers, students and administrators will gain a greater understanding of what career and college readiness benchmarks are and what strategies can be used to improve performance.

**Description of Participating Educational Institution**

Conditions at Boyd County High School are no different and, in some ways, worse than surrounding school districts, and schools across the state and nation when looking at how well students are being prepared for success upon graduation. On the surface, graduation statistics from 2010 point out that Boyd County High School boasts one of the highest graduation rates in the state of Kentucky at 95.94%. In
addition, these data taken in 2010, when compared with graduation rates of 90.69% in 2009, and 93.95 in 2008, indicate that Boyd County High School is making a determined effort in seeing that the students stay in school and receive a diploma. Although this should be celebrated, there are some troubling data. Over this same time period, career and college readiness scores do not indicate that this large group of graduating students is adequately prepared for a career or college. Over the same three year time span (2008-2010), average composite ACT scores for Boyd County High School seniors were 18.1 (2010), 18.0 (2009), and 20.3 (2008), all of which are below state and national averages. Looking at these scores further indicates that between 2008 and 2010, the percentage of students meeting Career and College Readiness Benchmarks in all four testing areas decreases, and in addition, the average score per subject area is below the Career and College Readiness benchmark, set by both ACT and Kentucky's Council on Post-secondary Education. As a result, the promise that a high school diploma provides in Boyd County does not meet the intended goal, that any student who graduates will be career or college ready.

Some will argue that not all students should be measured successful or not by the ACT because not all students plan on going to college. ACT's 2006 report, *Ready for College and Ready for Work: Same or Different?* provides evidence that all graduating seniors, whether attending college or entering into a career out of high school require the same basic knowledge and skill set to be successful, indicating that performance on the ACT tells us much more than predicting future college success. This clearly demonstrates a need on the part of Boyd County High School to continue
the push to keeping graduation rates high, but with a greater amount of attention being paid to preparing them for success upon leaving high school.

In attempting to understand this problem, it is necessary to pinpoint areas that could be the source of the problem in helping students become career and college ready. One of the ways that this can be done is by looking at longitudinal school data from ACT’s Educational Planning and Assessment System. The three components of this system are the EXPLORE, PLAN and ACT test. Starting in the 8th grade, all students in the Boyd County Public School system take the EXPLORE test, they take the PLAN in 10th grade and the ACT in the 11th grade. Each test serves as a predictor for career and college readiness at the given grade level. By tracking the percentage of students who meet benchmark in 8th grade on the EXPLORE, 10th grade on the PLAN, and 11th grade on the ACT, one can begin to see a clearer picture of what is happening academically for students as they progress through Boyd County High School. It will also be necessary to not only look closely at the percentage meeting benchmark but also the percentage meeting benchmark by subject in an effort to identify curriculum and course weaknesses that exist. The data will also provide a basis for professional growth plans by faculty if evidence suggests that the curriculum weaknesses may be tied to instructional practice or strategies.

The EPAS data showed that from 2006-2010 on the EXPLORE, the percentage of students meeting benchmark by subject area decreased across the board and had an overall decrease in average composite score. From 2007-2010 on the PLAN, the percentage of students meeting benchmark by subject area showed
minimal growth and a slight increase in the average composite score. Over this same
time period on the ACT, there were percentage increases in those meeting
benchmarks on both the English and Mathematics sections; however, there are net
decreases in the percentages of those meeting benchmark in both Science and
Reading. Between the years of 2008-2010, 12th grade students who took the ACT
showed a decrease in the percentage who met benchmark in all subject areas, except
mathematics, which saw no net gain or loss. There is a clear indication that starting
with 8th grade, a vast majority of students are below benchmark or demonstrate a
performance in the “basic skills range.” By the beginning of their 10th grade year,
students in BCPS have not seen a significant increase in career and college readiness,
and from 10th to 12th grade, there is a little done to specifically target the decrease in
the percentage of students who score at career and college readiness benchmarks.

The data from ACT’s EPAS can also be used to track a specific group
throughout their education. Available data can only be provided for two complete
classes due to records only going back six years. From the 2006-2007 school year to
the 2009-2010 school year, this class of students who met benchmark saw a net
percentage decrease of 2.3 (when totaled across subject areas) from the EXPLORE to
the PLAN, and a net percentage decrease of 47.6 (when totaled across subject areas)
from the PLAN to the ACT. When retaking as 12th grade students this class saw
percentage increases, in those meeting benchmark by subject area, across the board.
From the 2007-2008 school year to the 2010-2011 school year, this group of students
saw a net percentage increase of 12.4 (when totaled across subject areas) from the
EXPLORE to the PLAN, and unfortunately a significant net percentage decrease of 44.5 (when totaled across subject areas) from the PLAN to the ACT. Insufficient data currently exists for this class as a group of seniors to track increases as with the previous class. An in-depth analysis as part of this study will determine whether or not the differences in scores that have been noted are, in fact, significant and important when standard deviations are considered.

**Outcomes**

It is the purpose of this project to see the following outcomes:

- greater understanding of college and career readiness among students, parents and faculty
- greater support and understanding of the instructional practices put in place to achieve higher readiness rates among students, parents and faculty
- implementation of procedures and programs to support the needed cultural environment
- increased performance on EXPLORE for 9th grade and PLAN for 10th grade
- demonstrated EPAS growth
- lower dropout and retention rates
- continued success with high graduation rates

**Involvement/Collaboration**

Lowell Shawn Thornbury:

- administration of and data analysis of all career and college readiness assessments
• develop electronic “tool” or application to provide an IIS for any stakeholder interested in understanding strategies for improvement that are linked to career and college readiness as well as common core standards.

• Communicate and educate all stakeholders in the use of the tool.

Russ Foster:

• Provide technical support in development of and access to web resource

• Aid in development of software application (Microsoft Access, SchoolPointe)

**Timeline**

**Spring 2012**

• Collection of resources, supporting research for development of tool

• Meet with Russ Foster on needed resources for development of web tool

**Summer 2012**

• Continued collection of resources

• Development of PDFs for Web resource

**Fall 2012**

• Completion of resource collection and input of data to finish tool development.

• Professional development provided to middle school and high school instructors (I and II)

• Administer and collect survey data
Spring 2013

- Continued collection and analysis of survey data
- Completion of Capstone project
- Introduce use of tool

**Budget**

There will not need to be a separate budget for this project because all activities are being funded and supported by Shawn Thornbury.

**Evaluation Plan**

Success of this project will be the successful development of and use of the software application by stakeholders as a means of improving understandings of career and college readiness, as well as finding individualized strategies toward improvement. Data from those who used the tool will be used to determine the extent of its usefulness among teachers and students.

**Consequence Analysis**

The advantages of conducting this project are that more stakeholders will understand the importance of and take greater responsibility in working toward college and career readiness. Likewise, teachers will understand that instruction and assessment must be focused on college and career readiness goals and steps must be taken to help provide a path for each student to set their own goals and accomplish them. Parents will play a more active role in communicating this importance to students as well as understanding and supporting the actions and practices of school
administrators and teachers that are working toward creating a thriving career and college readiness culture. This project will also build greater collaboration between Boyd County High School and Boyd County Middle School. The potential limitations of this project however, lie in the how much the tool is used. There may also be varying degrees of support from parents who do not agree with the state, district or school’s plan to achieve career and college readiness for all students.

**Intended Audience**

The software application created from this project will be provided for Boyd County Public Schools, parents of Boyd County High School and Middle School students and anyone else interested in finding use of a tool that aids in a making a successful college and career readiness transition from eighth to ninth grade possible.
Reference Lists
Executive Summary Reference List

ACT. (2008). The Forgotten Middle: Ensuring that All Students are on Target for College and Career Readiness before High School. Iowa City, IA

ACT. (2012). Making Effective Use of ACT’s Longitudinal Assessment System. Iowa City, IA

ACT. (2012). Staying on Target: The Importance of Monitoring Student Progress toward College and Career Readiness. Iowa City, IA
Capstone Reference List


ACT. (2006). Ready for college ready for work: Same or different? Iowa City, IA

ACT. (2007). Rigor at risk: Reaffirming quality in high school core curriculum. Iowa City, IA

ACT. (2008). ACT’s college readiness system: Meeting the challenges of a changing world. Iowa City, IA

ACT. (2008). The Forgotten Middle: Ensuring that All Students are on Target for College and Career Readiness before High School. Iowa City, IA


ACT. (2012). Making Effective Use of ACT’s Longitudinal Assessment System. Iowa City, IA

ACT. (2012). Staying on Target: The Importance of Monitoring Student Progress Toward College and Career Readiness. Iowa City, IA


Appendices
**Middle to High School Career and College Readiness Transition Survey**

<table>
<thead>
<tr>
<th>Systems Thinking</th>
<th>HIGH SCHOOL</th>
<th>MIDDLE SCHOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Does Boyd County Middle/High School have a systemic process for addressing CCR?</td>
<td>100% yes</td>
<td>100% yes</td>
</tr>
<tr>
<td>2. Is this a mandated process or have resources been made available for teachers to address CCR independently?</td>
<td>28.5% Man./ 71.5% TD</td>
<td>70% Man./ 30% TD</td>
</tr>
<tr>
<td>3. Does the systematic process rely on the use of data?</td>
<td>100% yes</td>
<td>100% yes</td>
</tr>
<tr>
<td>4. Did the PD on the EXPLORE/PLAN and the Boyd County IISs aid in the development and evolution of a systemic process?</td>
<td>100% yes</td>
<td>90% yes/ 10% no</td>
</tr>
<tr>
<td>5. Did the Professional Development on the EXPLORE/PLAN help you understand the need for a systematic process?</td>
<td>100% yes</td>
<td>90% yes/ 10% no</td>
</tr>
</tbody>
</table>

| Transitions | | |
|-------------|-----------------|
| 1. Do Boyd County Middle School and Boyd County High School have a transition plan or program for 8th and 9th grade students? | 100% yes | 90% yes/ 10% no |
| 2. Does the transition program address Career and College Readiness? | 100% yes | 20% no |
| 3. Does collaboration between the Middle School and the High School on CCR exist as a part of the transition program? | 71.5% yes/ 28.5% no | 60% yes/ 40% no |
| 4. Did the PD provide you with a better understanding of the transition process toward Career and College Readiness? | 100% yes | 50% yes/ 50% no |
| 5. Do the Boyd County IIS help provide a better understanding of the CCR Standards and how they transition between the EXPLORE and PLAN? | 100% yes | 100% |

| Data Driven Decisions | | |
|-----------------------|-----------------|
| 1. Is data used to make educational decisions for students at BCMS/BCHS? | 100% yes | 100% yes |
| 2. Is data used to make early Career and College Readiness decisions for students at BCMS/BCHS? | 100% yes | 80% yes/ 20% no |
| 3. Is data being used to assist in transitioning students from BCMS to BCHS? | 100% yes | 40% yes/ 60% no |
| 4. Do the Boyd County Individual Intervention Sheets aid in this process? | 100% yes | 40% |
| 5. Have you used the Individual Intervention Sheets for your class/ students? | 100% yes | 60% yes/ 40% no |

| Early Intervention/RTI | | |
|------------------------|-----------------|
| 1. Is there a process for early intervention for addressing Career and College Readiness at BCMS/BCHS? | 100% yes | 100% yes |
| 2. Is data used to build intervention plans for students who do meet benchmark as they transition from Middle School to High School? | 100% yes | 100% yes |
| 3. Do the Boyd County IISs help provide an understanding of which CCR standards need to be met to reach benchmark? | 100% yes | 100% yes |
| 4. Do the Boyd County Individual Intervention Sheets aid in the early intervention process at BCMS/BCHS? | 100% yes | 40% |

| Small Learning Communities | | |
|----------------------------|-----------------|
| 1. Are small learning communities being used at BCMS/BCHS? | 100% yes | 100% yes |
| 2. Do the small learning communities allow for more individualized instruction at BCMS/BCHS? | 100% yes | 100% yes |
| 3. Are Career and College Readiness Goals addressed in these small learning communities? | 100% yes | 70% yes/ 30% no |
| 4. Do the Boyd County Individual Intervention Sheets make it easier to address these goals in small learning communities? | 100% yes | 100% yes/ 0% no |

| Total reporting | 10 total |
VITA
Lowell Shawn Thornbury

Date of Birth: 3/15/1976
Place of Birth: Ashland, KY

EDUCATION

(May 1998) Bachelor of Arts in Education
University of Kentucky
Lexington, KY

(August 1999) Masters of Arts in Social Studies Secondary Education
University of Kentucky
Lexington, KY

(May 2008) Masters of Arts in School Administration
Morehead State University
Morehead, KY

(Pending) Doctor of Education
Morehead State University
Morehead, KY

PROFESSIONAL EXPERIENCES

(1999 - 2010) Social Studies Instructor
Boyd County High School
Ashland, KY

(2010-Present) Curriculum and Assessment Coordinator
Boyd County High School
Ashland, KY