ABSTRACT OF CAPSTONE

Steven A. Stubbs

The Graduate School

Morehead State University

April 23, 2015

ANALYSIS OF STRATEGIES USED TO ENABLE HIGH SCHOOL
CAREER AND TECHNICAL PROGRAMS TO BE HIGH PERFORMING IN
KENTUCKY

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Abstract of Capstone

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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

Steven A. Stubbs

Olive Hill, Kentucky

Committee Chair: Michael W. Kessinger, Assistant Professor

Morehead, Kentucky

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College and Career Readiness is a state mandated performance measure that all Kentucky schools are striving to achieve, however many school systems do not know the steps needed to appropriately implement college and career ready. The purpose of this research project is to examine the understanding of the administration, counselors and teachers of districts. The review of literature and data from surveys, from principals, and teachers, will help to set up a training procedure for schools in the state to improve their college career ready accountability.

A survey instrument and interviews were used to collect the data. The population for the interviews consisted of principals of the top 10% of schools that have a high achievement of CCR.

KEYWORDS: Career Pathways, College Career Ready, Course Sequencing, Career and Technical Education.

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KENTUCKY

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DEDICATION

This capstone is dedicated to my loving and supportive wife Joyce. You were there when support was needed, and also listened and helped with suggestions towards my research. With your positive support you have made this journey happen. To my mother, thank you for everything you have instilled in your children about working hard and having determination to accomplish what you start. To my nephews and niece, never forget that with hard work and dedication you can achieve anything.

In memory of my father Robert Stubbs who along with his wife, my mother, made sure that we were provided with the support we needed along with guidance of the importance of work hard, being honest and respectful to others. He was very supportive when I mentioned I would be applying for a doctoral degree. I know he has been watching me during my journey and is happy with what I have accomplished.

ACKNOWLEDGEMENTS

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Chapter One

Introduction

Schools across Kentucky are under the microscope to help all students meet Career and College Readiness (CCR) benchmarks. For schools with Career and Technical Education (CTE) programs, success of the program can have a major, positive impact on school accountability scores. Students completing CTE courses in the desired program or pathway areas, who meet the requirements to take and successfully complete an industry certification or state occupational skills assessments can, and do, help improve school outcomes.

High performing career and technical education programs not only help school accountability scores, but also better prepare students to be successful in the workforce and enter advanced degree higher education institutions with little to no need for remediation (KDE, 2013). This is in part due to the fact that career pathways, by design, require ongoing collaboration between content teachers and CTE teachers, with additional collaboration with industry leaders. What separates college preparatory bound students from CTE students is that CTE course lessons are, by-in-large, problem based with an intentional focus on the application of skills and knowledge. Daggett (2012), in his application model combined with Bloom's Taxonomy continuum of learning demonstrates the importance of application in the rigor and relevance of learning. As students move from: 1) application in one discipline, to 2) apply discipline, to 3) apply across disciplines, to 4) apply to real-world, predictable situations and finally, 5) apply to real-world, unpredictable

situations demonstrate that sustainable learning takes place when practice and application are intertwined that lead to assimilation and adaptation, the highest form of learning.

According to Rothman (2012), teachers must be prepared to teach the new common core standards and that charge will require some major changes in classroom practice to enable students to meet these higher standards. The vision developed for career and technical programs and the processes in place with regard to course offerings, course sequencing, and the application of knowledge through problem based learning serves as one model for the needed change.

Schools could benefit from designing an educational pathway for all students, outlining a sequence of courses that students need to follow to enable them to be a successful completer within the college and career readiness category. These career pathways have the capacity to prepare students to advance in postsecondary education to completion or to achieve industry recognized certification (Hull, 2006).

Sambolt and Blumenthal (2013) expressed "College and career readiness is rapidly supplanting high school graduation as a key of the K-12 education system" (p. 2). With the ever-changing demand from the workforce, the students of today will benefit from the education gained by pursuing a postsecondary education or a specific skilled training to meet the world's economic demand for 21st century prepared workers in the world.

Stone and Lewis (2012) believe that career guidance is the missing link in college and career ready. This is a continuous process where students need to have

guidance to determine the courses they need to take based on the career pathway they

have chosen. There needs to be a clear focus on the courses needed and the

appropriate support needed from teachers, counselors, and building principals.

Problem Statement

Limited research is available on the common strategies being implemented

between high performing career and technical programs in Kentucky. The problem is

schools are graduating students who are not college and career ready. There is a need

to prepare our students for the 21st century workforce.

Purpose

The purpose of this study was to analyze strategies used to enable high school

career and technical programs to be high performing in Kentucky in meeting and

exceeding CCR benchmarks. Commonalities of the research findings were analyzed

and shared to impact practice.

Significance

Little has been done to analyze what career and technical programs are

consistently doing in Kentucky in terms of scheduling, counseling, planning, and

student support. Findings from this study have the potential to impact systemic

processes, or the lack thereof, in high performing schools as they unveil the

commonalities among each to better inform others of what is working. According to

Marzano, Walters and McNulty (2005), the leadership in schools plays a major role in

the success or failure of the organization. This study can impact how leaders lead and

build capacity in schools using the improvement strategies this study seeks to find.

Research Question

This study attempted to answer the research questions: What strategies are commonly implemented in high school career and technical programs in Kentucky that impact schools meeting and exceeding college and career ready benchmarks? What strategies are implemented at the high school level to meet the needs of students and CTE programs?

Summary

Sambolt and Blumenthal (2013) believe that college and career ready requirements in many cases replace the high school graduation requirements. With this high level of accountability in high schools pressing all students to reach college career ready, it is very important that all stakeholders work together to make sure that students are able to reach the CCR requirements to graduate.

Definitions of Terms

The following terms are defined as they were used in this study:

ATC – Area Technology Center (ATC) State operated career technical education center.

Benchmarks – Benchmarks are a set of standards that are in place to meet the minimum requirements to be able to progress in this case with education to go to postsecondary educational institutions without the need for remediation courses.

CCR – College and Career Ready (CCR) can be defined as a student preparation needed to be able to enroll in postsecondary educational institutions without the need to take remediation courses.

Career Pathways – Pathways is defined as a program of study (such as carpentry, automotive technician, information technology, STEM, etc.) a student takes and completes four credits that lead to an industry related certification.

CTC – Career Technical Center (CTC) Locally board operated center for career technical education.

CTE – Career and Technical Education (CTE) is a career preparation program to prepare students through a specialized sequence of technical course along with integration and collaboration of academic courses. Career and Technical Education was formally known as vocational education and was officially changed by the federal government to CTE in 1999.

Individual Learning Plan - Individual learning plan (ILP) is a student developed educational course program that will guide the student through the sequence of educational offerings to finish in a required time period.

Industry Certification – Industry certification is an assessment that is industry developed and recognized in mastering certain skills related to the specific trade or occupation.

Kentucky Occupational Skill Standard Assessment – Kentucky Occupational Skill Standard Assessment (KOSSA) initially established and developed by the state with input from industry partners to develop an assessment to measure the knowledge attained in certain pathways by students. The state later included the assessment data from assessments as part of the CCR accountability.

Problem-based – Problem-based learning is where students learn through problem solving and critical thinking applications

Sequencing – Sequencing is the process in which courses follow each other in a specific process to build on the foundation taught from the previous course

Technical Education Data System – Technical Education Data System (TEDS) is Kentucky's official student data collecting system used for reporting to the United States Department of Education for Perkins Grant accountability. TEDS collects data on graduation rate, academic and technical skill attainment, and postsecondary and or industry placement after graduation.

Chapter Two

Review of Literature

The purpose of this study was to analyze strategies used to enable high school career and technical programs to be high performing in Kentucky in meeting and exceeding CCR benchmarks. In the process of meeting and becoming a high performing career tech program meeting CCR benchmarks, you would have to incorporate the different aspects that are listed in the literature review. The literature review provides a discussion of the various components needed to enable high school CTE programs to assist students to meet CCR distinction.

Systems thinking relates to how the schools and the leaders look at what they plan to achieve and how they are going to reach that goal, the big picture. System thinking involves everyone involved in the process. For CTE programs, there is not only guidance from the Kentucky Department of Education, but also from advisory boards that are made up of the various stakeholders that help programs to better prepare students within a specific pathway.

The next step in the process is how the career clusters, career pathways, and program of studies are introduced and used in the schools. This process introduces the importance of setting up the proper programs for students that they are able to enroll in the career field of their choosing. While not all career pathways are offered at all high schools, the selection of the most appropriate programs should be based upon both the needs of the area, and the interest of the students.

Course sequencing is the process of making sure that the courses offered are aligned to the pathway that is offered to the student and is meeting the requirements for the program. The leadership in the school sets the foundation to setting up the process for the students to be able to systematically progress through their program of study. If the leadership is not knowledgeable of the process, the ability to succeed is not very high.

The accountability portion is tied to all aspects of education from the leadership to counselors, teachers, and students. The accountability is directly related to the process instituted from leadership down to the students. The process should prepare the students to meet the requirements related to the career path to meet the type of assessment that is introduced to the students. The importance of collaboration is looked at as a need to set the pace for the students to be able to meet the requirements that they are working toward.

Collaboration is a large undertaking that involves everyone to make it happen and work. Advising and counseling is the help and guidance provided to the student to help them navigate through the process to reach the required outcome of meeting the benchmarks for their goals of accomplishment.

To help the students achieve their completion goals and understanding to be able to test with strong knowledge of skills the use of problem-based learning is used. This builds on prior learning that helps to reinforce that knowledge and to help with the progression of the students learning. The introduction of application or project based learning is the combination of the prior learning and how to use this knowledge

for the demonstration as to show the use of the knowledge learned and not just

regurgitate the information. Some of the industry certifications the state accepts as a

part of the accountability index are directly related to application/project based

learning. The information provided will demonstrate the connections to how a high

school career and technical education program can achieve high success.

Strategies of Implementing Outcomes Of Career and Technical Education Programs CCR Benchmarks and for meeting Industry standards

Systems Thinking

- Leadership
- Problem Based
- Career Clusters / Career Pathways / Programs of Study
- Collaboration
- Accountability
- Application/ Project Based
- Advising / Counseling
- Course Sequencing
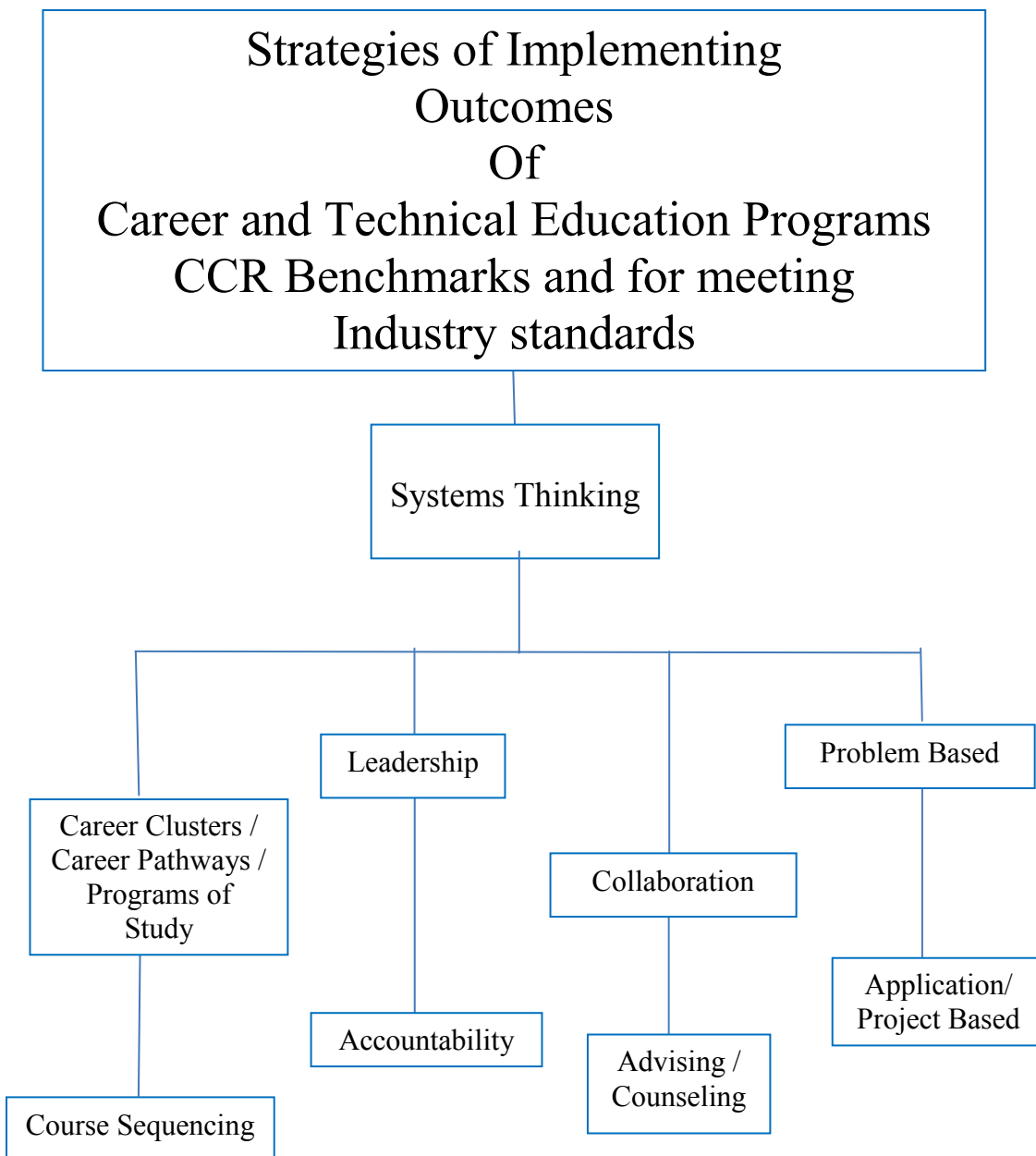
Systems Thinking

Systems thinking in the big picture is described by Senge (1990) as a training that is used to find the missing pieces. It is more of a framework that is used to see the connections that will make the big picture become clear and how to progress in the proper direction.

Heck (2004) explains how systems framework is used to organize research using the Easton's system framework. This framework was used to show the systematic process on the effects of the environment and its effects on the policy that are implemented as they are released. The framework system was originally used in government operations and was then used in education to further understand the policy and structures that are in use in educational settings.

Education is a unique system where the goal is to prepare students to be successful, to be prepared for college or additional career training, and to enable students to move on to a particular vocation for their adult life. Unlike our counterpart of industry, where employers can abandon the less productive and cause distractions to the lives of individuals, schools are just the opposite. The schools cannot choose whom they have as students to work with. They have to work with all students and get them prepared to meet the requirements of CCR benchmarks (Daggett, 2008).

The importance of systems thinking is that it is multi-dimensional. The use of different aspects of thinking will expand the potential of looking at greater results for the benefit of all. Systems thinking introduces you to alternative ways look at

concepts you will encounter in a different light. Being open minded to the different

concepts and not setting boundaries that allow you more allowance to be acceptable

to different ways of approaching the concept of learning and understanding (Lynesis,

1995).

Career Clusters / Career Pathways / Program of Study.

Career clusters are the programs of a similar field that are grouped together

such as the construction cluster, which includes carpentry, electricity, plumbing, and

masonry. The individual programs that are listed have individual program of studies

to meet the requirements to successfully finish the program.

The National Association of State Directors of Career Technical Education

Consortium explains:

The National Career Clusters Framework provides a vital structure for

organizing and delivering quality CTE programs through learning and

comprehensive programs of study (POS). In total, there are 16 Career

Clusters in the National Career Clusters Framework, representing more than

79 Career Pathways to help students navigate their way to greater success in

college and career.

As an organizing tool for curriculum design and instruction, Career

Clusters provide the essential knowledge and skills for the 16 Career Clusters

and their Career Pathways. It also functions as a useful guide in developing

programs of study bridging secondary and post-secondary curriculum and for

creating individual student plans of study for a complete range of career

options. As such, it helps students discover their interests and their passions,

and empowers them to choose the educational pathway that can lead to

success in high school, college and career.

And because the knowledge and skills encompass both secondary and

postsecondary education, the Framework informs efforts to strengthen and

improve student transition from secondary to postsecondary education.

(National Association of State Directors of Career Technical Education

Consortium (NASDCTEC), 2013)

In a discussion with Dr. Joyce (Wogoman) Stubbs (personal communications,

August 7, 2014), project director for the National Human Services Career Cluster, the

career cluster project had a goal of framing various career clusters. A team of

educators, staff from various states department of education, and business and

industry professionals developed each cluster. After the basic information for each

cluster was decided upon the general public was asked for validation and input.

Those items were considered and the pathways were born. The process did not

happen overnight it took multiple meetings, conference calls and emails, which took

well over a year to develop each cluster.

Career pathways are defined as academic, technical, and real world based

instruction that are rigorous and challenging in order to meet the needs of

postsecondary education, and industry in today's economic industrial society

(Hoachlander, Stearns, & Studier, 2008). It is important that schools provide students

with encouragement to select a pathway in the career of their choice. In additional,

experiences along with knowledge needed to be successful in a career or postsecondary education (Achieve & National Association of State Directors of Career Technical Education Consortium, 2014).

Jobs for the Future, a non-profit workforce group commented that individuals should use career pathways, which are the effective means to earn credential in a career. For millions of Americans that have an education below high school and are lacking in basic skills, vocational training provides an opportunity to acquire and develop skills in a desired interest. Many businesses and service delivery agencies require some type of postsecondary education to meet the requirements of employment. It has been inferred that a large population of the nation will be presented with obstacles to meet the needs of business. The enrollment in pathways to meet the demand of business by individuals will not be met as this type of education is not being presented through pathways. Wilson's study of Adult Skills reinforces the information that at least one in six adults have low skills in literacy and one in three have low skills dealing with numbers, which puts the nation below average in the international ranking (2014).

National Assessment of Career and Technical Education – Interim Report, U.S. Department of Education Office of Planning and Policy Development Policy and Program of Studies Services (2013) reports that Perkins IV provides a new programmatic strategy shifting away from isolated stand - alone CTE classes to requiring a coherent program. Program of Studies (POS) should be viewed as embodying challenging academic content and technical content conveyed in a

progressive sequence of course work incorporating secondary and postsecondary education elements. The adoption of the POS implies that adequate career preparation requires readiness for advanced learning beyond high school, and that CTE course work should culminate in the award of an industry - recognized credential or certificate at the postsecondary level, or to a degree.

The Kentucky Department of Education (KDE) requires that every CTE program receiving Perkins Title 1C funding submit a program of studies each year along with their local application (KDE, 2014a).

The POS would be considered the sequence of courses, which would include an introduction into the career program. Then, the next course taken would help with the understanding and comprehension of the previous courses related to the programs. As the courses progress through the program the skill level and the comprehension level raise to meet the levels required to obtain industry certification through the sequence of courses related to the program of study. The students will also gain what industry has signified as a major educational need that is the soft skills for the 21st century workforce. The program of study with the proper alignment should also be a rigorous instructional practice to meet the CCR standards (National Association of State Directors of Career Technical Education Consortium, 2014).

Course Sequencing

Sequencing of courses is a critical component for high school students. By having the courses scheduled in a sequential order, it helps to prepare the students to progress towards graduation and enter the workforce or postsecondary education.

The only way this can happen is if the high schools set up their schedules so that students will take the proper courses in the proper order to ensure that they graduate prepared for their next stage in life. The schedule has to have the course offerings setup as a progression of courses that build on the prior course instruction (Campbell, Brown, & Guy, 2009).

Cook (2004) discusses the importance of high school scheduling and how very important of an instrument that is when used by schools. Teachers can use the schedule so they know what courses they are instructing and when they are being offered. The schedule is a guide for the students so they know what courses they are taking, as well as where and when they are being offered. Scheduling should be a tool used by the school to make sure that all aspects of the students' educational requirements are being met and also meeting the schools educational mission.

Block (1971) describes the importance of sequential learning through the use of mastery learning strategies that have been the most effective for the foundations of learning. This includes everything from setting up the proper sequencing of the courses the student has gained the important instruction on the foundation needed to be prepared to move forward. The progression is based on becoming familiar with the basic information first. As an example you have to know the letters of the alphabet before you can spell words. The next portion is to use the information previously learned and build towards the next level showing the relevance and importance of connecting the sections taught. Then you are going to move on to

taking the information gained and take steps to have the students think and diagnose possible solutions through rigorous instruction (Morrison, Ross, & Kemp, 2007).

Aliaga, Kotamraju, and Dickinson (2011) from the National Research Center Career and Technical Education conducted a study related to the sequencing of courses in career technical programs. The study showed that students had to be in a program pathway and take the sequence of courses needed to be considered a preparatory student. To be a preparatory student, the student had to have taken three credit-bearing courses. If the students were in fewer than three credit courses, they were then considered exploratory, which was about 25% of students. The study shows that by taking the proper sequence of courses, the preparatory students were better prepared to take the industry assessment for the program of study.

Leadership

Leaders should be an inspiration to organizations with the ability to share their picture of the future. The leader would be a person that would have a hard time to have constituents that will follow them if they have no goals or a way to measure their progression. The leader should be able to share their mission, values, and goals within the organization (Senge, 1990).

Father Theodore Hesburgh (1987) reported, "The very essence of leadership is [that] you have to have a vision. It's got to be a vision you articulate clearly and forcefully on every occasion. You can't blow an uncertain trumpet" (p. 68).

Daggett (2012), in his book *Effective Instruction,* wrote about the studies that have been performed on effective teaching and what it takes for the school leader to

make an impact. What was mentioned was that teachers needed to have support and

not be isolated from the administration or other teachers. The instructional leaders

must provide resources and support to the teacher for the teacher to be effective. The

administration should also be a resource for the teachers to make sure that the

teachers understand how to initiate a rigorous and relevant learning environment for

the students.

The National Association of Secondary School Principals is concerned

enough about instructional leadership that it published a handbook. The handbook

describes that for the principal to be effective they need certain skills. Those skills

are familiar with knowledge of the instruction and skills used in the classroom. It

mentions that those skills are lost the longer the administrators are out of the

classroom. As the principals lose these skills they can become less effective as a

leader (Keefe & Jenkins, 1984).

Accountability

There is a reference to "Payment by Results" that came from English

Parliament that offered the educators in Victorian era England the ability to receive

payment based on the achievement of their students each year. This was eventually

repealed as there were too many negative instances from all parties and was affecting

the educational outcome for students. More than 30 years ago there was a term that

started to show up in literature in regards to education and that term was

accountability. The term accountability in education seems to be the new catch-all

phrase for what students, teachers, and schools are responsible for doing (Frymier,

1996). Even though this is not a new term, it still has an impact on what occurs in

education. This term is now used many times by policy makers and educational

programs in the nation.

     The household phrase that has become very recognizable is "Education

Accountability". This phrase has caused educators to jump on every band wagon that

rolls down the road promising to enhance education that is tied to dollars from the

federal government. Even though these initiatives have been used the understanding

of education accountability is still misunderstood (Barbee & Beck, 1974).

     Industry skill standards are described by Bailey and Merritt (1997), as being

developed as a result of federal legislation. The standards are curriculum activities

taking place in many of the states. The development of industry and occupational

skill standards systems has had an influence on education reform. Efforts to develop

standards that can be used by both educators and employers when defining the skills

and related instruction needed by the industries and occupation trades which

continues on an annual basis.

     The Kentucky Department of Education (2014b) describes what

accountability is and how it directly relates to the advancement of students

and education in what is needed for the future workforce:

> Future economic growth is dependent upon the availability of a highly skilled
>
> and quality-oriented workforce. In order to ensure that career and technical
>
> education students have acquired the skills necessary for successful transition
>
> from high school to postsecondary studies or the workforce, Kentucky

initiated a Skill Standards, Assessment, and Certification System. This

system is based upon clear and concise standards identified by employers

across the state which culminates in a performance based training and

assessment system. Skill Standards provide a common language, goals, and

reference points for employers, students, and educators. With these

commonalities, educators are better able to design curriculum to meet the

needs of industry; students have a better understanding of what they must

know and be able do in order to prepare for careers; and employers have in

place an efficient system for recruiting and evaluating potential employees.

(KDE, 2014b)

Accountability comes by way of many different measures. For the CTE

programs, one such measure is the Kentucky Occupational Skill Standards

Assessment (KOSSA). The students that are eligible to take this test have previously

completed three credits in a defined pathway as described by Kentucky Department

of Education's Office of Career and Technical Education branch by identifying the

purpose and expectations as related to CCR.

What is KOSSA?

- Kentucky Occupational Skill Standards and Assessments (KOSSA) are used

as a measure of technical skill attainment for federal Perkins accountability.

- KOSSA is now included as a component of Kentucky's Unbridled Learning

assessment and accountability system.

- KOSSA includes foundational academic, employability, and occupational

specific skills as identified by business and industry. (KDE, 2014b, p. 5)

Identifying Students

- Senior Preparatory Students enrolled in programs where a KOSSA is

available must take the KOSSA if they are not taking an approved industry

certification.

- Sophomore and Junior Preparatory Students who assess will not be included

for accountability reporting until their senior year. (KDE, 2014b, p. 12)

What is the definition of a preparatory student?

- A student who has completed two career and technical education credits in a

preparatory program and is enrolled in the third credit course(s). (KDE, 2014b

p. 13)

Wilcox (2006) describes the role of industry based certifications and the

importance to the nation with preparing students for the workforce. A lot of close

inspection on student achievement has been the inclusion of the industry certification

for programs of study in CTE. Over the past 5 years, industry based certification has

been closely watched by the national government as well as the local government and

how it has benefitted the students.

Wilcox (2006) describes how many states and educational bodies developed

practices and policies that address the inclusion of industry certifications into

program of studies. Community and Technical Colleges have incorporated industry

based certification in their program of studies that helps offer a wide range of

possibilities for potential students to meet the needs of the workforce.

Collaboration / Relationship

Collaboration is a term used by educators and a lot of other organizations. In

schools the collaboration works across many levels and areas. The schools need to

work with the teacher organizations so that there is a good and healthy atmosphere in

the schools for learning. The schools need to be able to work among their own

schools – the elementary with the middle schools and then the middle with the high

schools. This also works in reverse as well. The schools need to work together to

make sure that the students are receiving the instruction they need to be successful

through their school career (Schlechty, 1997). Bennis (1997) a well known author in

the area of leadership, describes collaboration as: "a global society, in which timely

information is the most important commodity, collaboration is not simply desirable, it

is inevitable. In all but the rarest cases, one is too small a number to produce

greatness" (p. 3).

Special education professors look at collaboration as an interpersonal

collaborative style for interaction that commences between individuals or groups that

engage and will share in the decision-making process working towards a common

goal. This type of collaborative style will increase the connection and develop a

better working environment for the advancement of the students (Friend & Cook,

1996).

In order for collaboration to work affectively relationships must be developed. According to Daggett (2008) on relationships' importance, this is not a new concept and it can have a big impact on the learning environment. The relationships can increase the student achievement. This can be achieved by including a higher expectation of instruction that will show the importance of the subject being taught and motivate the students to reach higher levels. Daggett believes that relationships are important but must have a connection to and compliment rigor and relevance that has been introduced through his research.

Hensley and Burmeister (2009) comment, "Strong relationships can lead to skyrocketing student achievement and test scores that go through the ceiling" (p. introduction xii).

Through the collaborative partnership from early education through baccalaureate completion including business and industry partnerships, this will help to raise student achievement in both academic and technical courses. This will lead to an increase the CCR accountability of the students (McGrath, Donovan, Schaier-Peleg, & Van Buskirk, 2005).

Advising / Counseling

The Kentucky Department of Education has determined that in the College and Career Readiness Unified Plan that there are four identified key strategies. The strategy pertaining to advising is: "College and Career Readiness Advising (focusing on the full implementation if the Individual Learning Plan and comprehensive advising programs)" (KDE, 2012 para. 3).

VonVillas (1995) wrote an article for National Association of Secondary School Principals about *The Changing Role of High School Guidance: Career Counseling and School-to-Work* states. What was described in the article on duties for the counselors was that counselors need to be more involved in the areas where the students are needing guidance. This should be accomplished by advising students in a more hands on approach while scheduling. "In too many schools, students select courses in an academic or general track without regards to personal goals" (Von Villas, 1995, p. 85). The most important information that should be conveyed to the students is the importance of focusing on the proper courses and how to track them and be aware of what they will need in order to be able to make educated decisions for themselves.

Anctil, Smith, Schenck, and Dahir (2012) wrote an article on the role of counselors with regards to student scheduling and ensuring students are getting the courses needed to meet the CCR benchmark.

Finally, one of the study's most encouraging findings is that recent school counseling graduates are prioritizing career development services. Counselor educators must continue to place an emphasis on preparing school counselors who are committed to ensuring that all students are career and college ready. Now more than ever, continued exploration regarding the relationship between career development, student learning, and postsecondary planning is imperative. (Anctil, Smith, Schenck, and Dahir, 2012, p. 119)

Stone and Lewis (2012) talk about the importance of counselors and students working together so that the student is moving along the proper road. The student's decision on a career path should not be a decision made without talking with someone like the counselor. The student needs to know what different factors are involved with the career they are looking into. For example, what life changing considerations are related to the career? Some careers involve a lot of travel and time away from home and family. Are there other sacrifices that might have to be made? Will the career require them to go to college for either to stay employed or for advancement? This type of information needs to be discussed with the students so they know all the information to help them make an educated decision on their life's future choices.

In an article written by Mei, Wei, and Newmeyer (2008) titled *Factors Influencing High School Students' Career Aspirations,* the authors looked at the aspects that high school students have to consider when deciding what they wish to be when they leave high school. The process that was described had students look at a plan for postsecondary education and which career options were related to the plan. The article also states that school counselors should be informed about what factors high school students need to know for career choices.

In an article written by Squires and Case (2007), one of the major factors is that high school counselors need to understand the potential for student earnings in technical fields and know that they are working with the next generation of workers for the nation.

Withington, Hammond, Mobley, Stipanovic, Sharp, Stringfield, and Drew Jr.

(2012) wrote about the roles of the guidance professionals:

The IGP [Individualized Graduation Plan] process is a key facet of policy

implementation and has served to increase counselor interactions with

students. Counselors at all schools reported increased interactions with

students. Some discrepancies, however, were identified between school

counselor and student reports of engaging in one-on-one career planning and

IGP development, with counselors reporting a higher level of student

participation.

Counselors reported a high rate of student participation in IGP conferences,

nearly 100% at most schools. Under EEDA, by the end of the 10th grade,

every student's IGP should include the selection of a career cluster and a

major within that cluster. Our survey of the class of 2011 just after 10th grade

found that only 85% of students reported having selected a "career cluster to

plan for" and only 65% reported having put together "a 'career plan' or 4-year

'Individual Graduation Plan.'" Sixty-three percent reported having selected a

major within their career cluster. Nineteen percent of student respondents

reported that they had not developed an IGP, while 17% reported that they

"didn't know" if they had developed an IGP.

One reason for the discrepancies in reports between counselors and students

may be an inconsistent use of EEDA terminology among participants. In focus

groups conducted with this same cohort 2 years later (near the end of the 12th

grade), some students did not immediately recognize the term Individual

Graduation Plan. However, most recalled having gone through such a

planning process once interviewers provided a few prompts. Many reported

having their parents involved in the process, especially when their IGPs were

first developed.

Interestingly, among students who reported on the survey that they had

completed an IGP, 49% reported that their school counselor was the most

helpful individual in this process, and 33% reported that a parent was the most

helpful. Almost half (47%) the students surveyed reported talking to friends

"3 or more times" about IGPs; however, only 4% reported that their friends

were the most helpful in IGP development.

In addition to talking about courses and scheduling, 72% of students reported

talking to a counselor about attending college; 64% reported talking to a

counselor about possible jobs or careers; and 63% reported talking about steps

necessary to pursue certain careers. (Stipanovic, Lewis, & Stringfield, 2012 p.

150-151)

Another method of career counseling that schools could implement is based

on the advisor advisee model. This was setup to go beyond the counselor's office.

The model is designed so that teachers advise students as to their career plans. The

time that is invested with a student to guide them along the process of making

decisions about their future is rewarding itself. The guidance supplied was supportive

and informative so that the students could look at all the aspects related to the

possible career field they are pursuing in the areas of possible earnings, education

needed along with technical training (Smith, Edmunds, & Ries, 1999).

Problem Based

A study performed by Schmidt, Rotgans and Yew (2011) described the impact

of problem based learning. What the research showed is that problem based learning

was considered to enforce prior learning with students as they have to recall the

information learned at an earlier time. The combination of prior learning and having

students work in small groups also taught them how to work collaboratively and

through common issues while working with others.

Problem based learning is an excellent way to build off of the student's prior

learning and how the areas covered tie together. The students will engage in the

application and implementation of knowledge learned prior with the current material

introduced, to be able to show their comprehension of information that was presented

to them (Hmelo-Silver, 2004).

Research on problem-based learning by Hung (2011) shows that project based

learning is very highly implemented. Some of the findings showed that the

effectiveness in problem based learning have focused on students' learning. The

implementation to have the students think at higher levels is the ultimate goal and if

implemented correctly the growth of the students will and shall progress.

With the ever-changing workplace to the modern area we have to look at

different ways to prepare students to be successful. There are many areas that need to

be looked at in education. One area is where teachers need to stay up to date on

knowledge and come up with new ways to prepare the next generation of

professionals. The preparation would take students past just academic instruction and

incorporates a problem based thinking process that will increase their content learning

and apply to real situations (Evensen & Hmelo, 2000).

Maggi Savin-Baden describes the characteristics of problem-based learning,

- Complex, real world situations that have no one 'right' answer are the

   organizing focus of learners.

- Students work in teams to confront the problem, to identify learning gaps,

   and to develop viable solutions.

- Students gain new information through self-directed learning.

- Staff act as facilitators.

- Problems lead to the development of clinical problem-solving capabilities.

(Savin-Baden, 2007, p. 8)

Problem-based learning in middle and high schools is described by Lambros

(2004) as problem-based learning (PBL) creates and provides an opportunity for

students to see the significance in what they are learning. The instruction should be

set to where the students see how the problem relates to a situation that they can

picture and then want to know how to solve the problem. This is going to show the

students the relevance and importance of the academics that have been taught and

how it can be applied to real world situations. This type of instruction will embed the information for a lifelong learning experience for the student (Lambros).

Research by Karukstis and Elgren (2007) explored the assessment of students in problem-based learning. The research showed that the students should perform problem-based learning but in a research base design. The findings indicated that students should be in different experiences where they would perform some assignments by themselves and in groups. They should have to make a presentation on their findings and also have a rubric as to how the assignment would be graded. This setup will ensure that the students are receiving the embedded skills needed for their future.

Application / Project Based

"Application of knowledge results in better learning. The compilation of research in communication and learning by William Glasser and others reinforces what we know instinctively and from personal experience – that we retain information better when we use it" (Daggett, 2012, p. 305). The way to engage more students is through application based instruction. This type of instruction will increase the rigorous learning that will increase the retention of students. This type of exposure for students will allow them to see the relevance and what they have come away with, they are then more open to perform this type of instructional practice (Daggett).

Using different teaching techniques allows students the ability to work on memory recall and have it deep rooted, not just the testing recall, forget process used

for understanding but not retention. Since the students are dealing with the major

push for success this process will be vital to increase student understanding and

application of their knowledge learned. This process will have educators looking at

various ways to change how they will instruct students to help them succeed (Hull,

2006).

Mergendoller and Larmer (2010) wrote an article on the Seven essentials of

project-based learning. "Some "projects" border on busywork. Others involve

meaningful inquiry that engages students' minds" (Mergendollar & Larmer, p. 1).

They describe how teachers will give students a project and information for where the

resources are located. The students produce a poster or model and even a PowerPoint

but none of these meet the level as intended. These projects are more along the lines

of busy work. A project is meant to be thought-provoking and engaging for the

students. They should follow these steps:

1. A Need to Know - Teachers can powerfully activate students' need to

   know content by launching a project with an "entry event" that engages

   interest and initiates questioning. An entry event can be almost anything:

   a video, a lively discussion, a guest speaker, a field trip, or a piece of

   mock correspondence that sets up a scenario.

2. A Driving Question - A good driving question captures the heart of the

   project in clear, compelling language, which gives students a sense of

   purpose and challenge. The question should be provocative, open-ended,

   complex, and linked to the core of what you want students to learn. It

could be abstract (When is war justified?); concrete (Is our water safe to drink?); or focused on solving a problem (How can we improve this website so that more young people will use it?).

3. Student Voice and Choice - This element of project-based learning is key. In terms of making a project feel meaningful to students, the more voice and choice, the better. However, teachers should design projects with the extent of student choice that fits their own style and students.

4. 21st Century Skills - A project should give students opportunities to build such 21st century skills as collaboration, communication, critical thinking, and the use of technology, which will serve them well in the workplace and life. This exposure to authentic skills meets the second criterion for meaningful work — an important purpose. A teacher in a project-based learning environment explicitly teaches and assesses these skills and provides frequent opportunities for students to assess themselves.

5. Inquiry and Innovation - Students find project work more meaningful if they conduct real inquiry, which does not mean finding information in books or websites and pasting it onto a poster. In real inquiry, students follow a trail that begins with their own questions, leads to a search for resources and the discovery of answers, and often ultimately leads to generating new questions, testing ideas, and drawing their own conclusions. With real inquiry comes innovation — a new answer to a

driving question, a new product, or an individually generated solution to a

problem.

6. Feedback and Revision - Formalizing a process for feedback and revision

during a project makes learning meaningful because it emphasizes that

creating high-quality products and performances is an important purpose

of the endeavor. Students need to learn that most people's first attempts

don't result in high quality and that revision is a frequent feature of real-

world work.

7. A Publicity Presented Product - Schoolwork is more meaningful when it's

not done only for the teacher or the test. When students present their work

to a real audience, they care more about its quality. Once again, it's "the

more, the better" when it comes to authenticity. Students might replicate

the kinds of tasks done by professionals — but even better, they might

create real products that people outside school use. (Mergendollar &

Larmer, 2010, p. 1-3)

Burkart Holzner and John Marx(1979) have written about knowledge

application and how it should be implemented. The application of large plans of

major importance need to have a plan for implementation. The plan should be well

thought out and be prepared for resistance as not everyone will be receptive to the

new concept. The importance of teaching how to implement and produce and plan

for contingencies is what should be covered (Holzer & Marx, 1979).

Julia Gorlewski and David Gorlewski (2012) believe that in the application of knowledge "The teacher understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues" (Gorlewski & Gorlewski, 2012, p. 63).

Research was performed on a school system and the information that was provided described how the teachers that learned new processes such as project based provided professional development for the teaching staff with how to and the results from their inception. The teachers were very interested in learning the concept as their fellow teachers were very enthused about this practice and the results were interesting as well. This process had brought about a different dialogue in the building that was based around the helping of student to achieve (Mohr, Rogers, Sanford, Nocerino, MacLean, & Clawson, 2004, p. 109).

Dan Hull (1995) describes the importance the high level thinking processes are need for the workforce. Industry is not wanting the products of a watered down educational system. They are needing highly motivated and well trained individuals. The individuals need to understand and be able to institute the why and how aspects of application-based thinking processes. Hull goes on and describes that students in the middle section of their educational knowledge placement should be given the opportunity to learn applied concepts and advanced cognitive skills in mathematics, sciences, and language arts these will help the students with their interests in a chosen occupation.

Many people think that problem-based and project-based are one in the same when in reality they are not. Project-based takes an on-going process of curriculum changes that are not always familiar with students or teachers. The learning environments for problem-based and project-based is the connection of knowledge and contexts. The understanding of knowledge in an application based process can be the bases for both, problem-based and project-based learning (Barron, Schwartz, Vye, Moore, Petrosino, Zech, Bransford, & The Cognition and Teaching Group at Vanderbilt, 1998).

Chapter Three

Methodology

This study was performed based on the information obtained from the Office of Career and Technical Education in the Kentucky Department of Education. The Office of Career and Technical Education (OCTE) performed a survey with counselors throughout the state to see how students are being instructed on how to achieve College and Career Readiness (CCR). What that survey showed there was inadequate, uninformed, and little understanding of the course sequencing and pathways for career and technical educational students.

The purpose of this study was to analyze strategies used to enable high school career and technical programs to be high performing in Kentucky in meeting and exceeding CCR benchmarks. Commonalities of the research findings were analyzed and will be shared to impact practice.

Data were collected which included a mixed method of both quantitative and qualitative.

Quantitative Data Collection Process

We collected quantitative career ready data on the Career and Technical Programs in the state by the using SurveyMonkey. The groups in the study surveyed were high school principals and high school teachers (Appendix A and B respectively). Both of these groups played a major role in schools achieving CCR.

The Kentucky State Department of Education's TEDS Coordinator was contact by way of email. A request was made for their 2011-2012 and 2012-2013 on

student career ready data. These data are contained in a spreadsheet showing the

number of students that met CCR in career and technical program areas (see

Appendix C). The 2013-2014 CTE CCR data spreadsheet was retrieved from the

Kentucky Department of Education's website from the Open House link on the main

page and clicking on school report card then on the data sets and choosing the CTE

Specific College and Career Readiness file link. The information gained from this

contact resulted in the Career and Technical Program CCR and Industry Standard

Ranking Spreadsheet of TEDS Data on CTE programs. This process was used to

determine the high performing high school career and technical programs that

resulted in high performance in meeting and exceeding benchmarks (Appendix F).

Surveys

All high school principals with CTE programs and teachers were sent an online

survey similar to the OCTE survey sent to counselors in the state.

- High School Principal Survey: Possible respondents 300 (CTC 46,

  ATC 53, and HS 201)

- High School Teacher Survey: Every teacher on the global email list

  were given the opportunity to respond

The survey that was used with counselors was developed and distributed by

the Office of Career and Technical Education an office in the Kentucky Department

of Education during 2012. The survey was modified for use with the high school

principals in respect to where in the question said counselor it was changed to

principal. The information gathered was used to perform a comparison of the

counselor data to see how the schools have looked at pathways, master scheduling and ILP's along with CCR accountability. Other areas that were examined were dual credit and articulation credit for students, and demographic information.

The teacher survey was conducted with similar questions to compare the knowledge of the educators who have a direct relationship to the students. The questions consisted of pathway, master scheduling, ILP, CCR accountability, dual / articulated credit and demographic information.

Qualitative Data Collection Process

The principal investigator collected qualitative career ready information on the top 10% of high schools combination of TEDS and CCR data. The determination of the top 10% was based on the number of survey participants that responded along with the CCR information obtained from OCTE's TEDS coordinator. The most current year data was retrieved from KDE's website that contained CTE CCR data for each school. With the data sheets combined and examining the CCR progression for the 3-year period, the schools that showed consistent growth over the time period were decided as the schools to contact and expand on the process they have implemented to have their school reach the high level of CCR in CTE programs. The principals that were identified were interviewed by the principal investigator either in person or by phone or video meeting.

Interviews

Twelve high school principals were interviewed which represented the top 10% combination of the TEDS and CCR data. The principals interviewed were

asking questions that provided triangulation of information related to the TEDS and

CCR data. The interview questions were developed with the input from an expert in

career pathway development. The interviews were used to gain more data and

clarification on the processes that have been used in their schools for achieving high

attainment in CCR with career and technical programs (Appendix C).

Process for Analysis of Quantitative and Qualitative Data

The TEDS data on CCR was obtained from the TEDS Coordinator in the

Office of Career and Technical Education within the Kentucky Department of

Education. The data were made available through an open request. The OCTE

branch already had the school districts CCR data broken down and separated for the

various specific information in a final format. The data that were received by the lead

investigator was contained in a spreadsheet from the TEDS Coordinator and the KDE

website. The data were compared by the lead investigator of this research to

determine the progression of CCR CTE percentages. The principal survey data were

examined by comparing the results to that of the counselor 2012 survey that was

performed by the Office of Career and Technical Education within KDE. The teacher

data were examined by looking at the information as to teacher understanding of the

career pathways and course sequencing with connection to CCR data. This

information was then compared to the principal and counselor survey to check for

consistency by examining overall percentages.

Chapter Four

Findings

The purpose of this study was to analyze strategies used to enable high school career and technical programs to be high performing in Kentucky in meeting and exceeding CCR benchmarks. This study attempted to answer the research questions: What strategies are commonly implemented in high performing high school career and technical programs in Kentucky that impact schools meeting and exceeding college and career ready benchmarks? What strategies are implemented at the high school level to meet the needs of CTE programs? This chapter represents the results of the survey instruments described in the previous chapter.

Survey Results

Survey instruments were emailed out to 300 principals known to have career and technical programs in their school (Appendix A). Of the 300 surveys emailed, 119 responded producing a response rate of 39.67%.

The teacher survey instrument was emailed out to 13,024 high school teachers (Appendix B). There were 1,270 respondents. Of those 1,270, only 30 responded to the first question, which was considered not a usable survey. The number of usable responses totaled 1,240, with an overall response rate of 9.52%.

The counselor survey was administered by KDE's OCTE in 2012, which involved 133 high school counselors. Those results were compared to the results from the principals and teachers to determine if there were any differences.

It should be noted that there were missing responses for principals, teachers,

and counselors on various items. The numbers of missing responses are reported

within the various tables. The survey contained 17 questions presented to the various

groups with a final prompt for comments by the respondents.

Scheduling students.

Table 1 summarizes the principals and counselors response to the question:

Do you use career pathways in scheduling individual students? Of the principal's

responses, 87.39% indicated that they used pathways when scheduling students.

There was a lessor percent of counselors (69.92%) 2012 survey responses that

reported using career pathways when students were scheduled in classes.

Table 1

Do you use career pathways in scheduling individual students?

	Principal (n=119)	Counselor (n=133)
Yes	104 (87.39%)	93 (69.92%)
No	11 (9.24%)	37 (27.82%)
Missing Response	4 (3.36%)	3 (2.26%)

Table 2 represents the teachers' response to: Do you have input on career

pathways in scheduling individual students? Of the teacher's responses, 57.98%

indicated they do not have input on career pathways in scheduling individual

students.

Table 2

Do you have input on career pathways in scheduling individual students?

Teacher (n=1240)		
Yes	512	(41.29%)
No	719	(57.98%)
Missing Response	9	(0.73%)

Table 3 shows the principal, teacher, and counselor responses to the question: How do you use career pathways in developing the master schedule? Of the principal's responses, 59.66% indicate career pathways are a driving force in developing the master schedule. The next highest response at 52.26% indicated by principals that CTE teachers submit course offerings. There was a lesser percent of the teacher's responses, 40.81% indicate student course requests drive the master schedule. The teacher's next response at 40.73% says career pathways are a driving force in developing the master schedule. Of the counselor's 2012 survey responses, 77.44% indicate student course requests drive the master schedule. The next highest response for counselors was 57.89% that CTE teachers submit course offerings in their career pathways to help develop the master schedule.

Table 3

How do you use career pathways in developing the master schedule? (Check all that apply)

	Principal (n=119)	Teacher (n=1240)	Counselor (n=133)
Career Pathways are generally not considered	6 (5.04%)	139 (11.21%)	7 (5.26%)
CTE Teachers submit course offerings	61 (51.26%)	383 (30.89%)	77 (57.89%)
Student course requests drive master schedule	53 (44.54%)	506 (40.81%)	103 (77.44%)
Career pathways are a driving force in developing the master schedule	71 (59.66%)	505 (40.73%)	23 (17.29%)
Missing Response	4 (3.36%)	119 (9.60%)	1 (0.75%)

Individual Learning Plan (ILP).

Table 4 presents the principal, teacher, and counselor responses to the ILP and how it is used in the high school with students and developing of scheduling. Of the principal's responses, 56.30% indicate is used at my school to help schedule students. There was a lessor percent of teacher's (44.60%) and a lesser percent of counselor's (45.86%) 2012 survey reported the ILP is used at my school to help schedule students.

Table 4

The ILP

	Principal (n=119)		Teacher (n=1240)		Counselor (n=133)	
could be a valuable tool but I don't have time to use it	39	(32.77%)	391	(31.53%)	57	(42.86%)
is an unnecessary tool	7	(5.88%)	155	(12.50%)	12	(9.02%)
is used at my school to help schedule students	67	(56.30%)	553	(44.60%)	61	(45.86%)
Missing Response	6	(5.04%)	141	(11.37%)	3	(2.26%)

Table 5 indicates the principal, teacher, and counselor responses to the question: Are you aware of the sequence of courses for the career pathways offered at your school? Of the principal's responses, 94.96% indicated that they are aware of the sequence of courses for the career pathways offered at the school. The teacher's (61.85%) and counselor's 2012 (87.22%) had a lessor percent. Combining the responses for the principals and counselors, 90.87% of those directly involved with schedule of classes have knowledge of the course sequence for particular career pathways.

Table 5

Are you aware of the sequence of courses for the career pathways offered at your
school?

	Principal (n=119)		Teacher (n=1240)		Counselor (n=133)	
Yes	113	(94.96%)	767	(61.85%)	116	(87.22%)
No	2	(1.68%)	354	(28.55%)	14	(10.53%)
Missing Response	6	(3.36%)	119	(9.60%)	3	(2.26%)

Table 6 refers to the principal, teacher, and counselor responses to the

question: Are you aware students who successfully complete three or more courses in

a career pathway are more likely to graduate from high school than those who do not?

Of the principal's responses, 94.12% indicated that they are aware students who

successfully complete three or more courses in a career pathway are more likely to

graduate from high school. Slightly over 77% of the counselor's 2012 survey

indicated they were aware of the impact of completing three or more courses would

have on the graduation statue while 70.32% of the teachers knew this potential

impact.

Table 6

Are you aware students who successfully complete three or more courses in a career pathway are more likely to graduate from high school than those who do not?

	Principal (n=119)		Teacher (n=1240)		Counselor (n=133)	
Yes	112	(94.12%)	872	(70.32%)	103	(77.44%)
No	7	(5.88%)	343	(27.66%)	26	(19.55%)
Missing Response	0		25	(2.02%)	4	(3.01%)

Table 7 represents the average GPA of the students enrolled in a CTE program. There is a high percent of counselor's (65.41%) 2012 survey reported the average GPA of students in CTE programs is 2.5-2.9. Of the principal's responses, 56.03% indicate that the average GPA of students in CTE programs is 2.5-2.9. There was a lesser percent of teacher's (38.31%) that reported the average GPA of students in CTE programs 2.5-2.9. Overall, based upon the responses, it appears that the majority of students participating in a CTE program have between a 2.5 and 3.4 GPA.

Table 7

What is the average GPA of students you enroll in a CTE program?

	Principal (n=119)		Teacher (n=1240)		Counselor (n=133)	
Less than 2.5	11	(9.24%)	82	(6.61%)	14	(10.53%)
2.5 – 2.9	67	(56.30%)	475	(38.31%)	87	(65.41%)
3.0 – 3.4	30	(25.21%)	282	(22.74%)	25	(18.80%)
3.5 or higher	0		14	(1.13%)	0	
Missing Response	11	(9.24%)	387	(31.21%)	7	(5.26%)

College and Career Ready (CCR).

Tables 8 through 10 present questions that investigated aspects of students being College and Career Ready. The respondents were asked if they understood the different measures for determining if a student was College Ready and/or Career Ready (Table 8). Of the principal's responses, 93.28% indicated that they are aware there are different measures for college ready and career ready. There was a lessor percent of teacher's (80.97%) that reported they are aware there are different measures for college ready and career ready. There was a higher percent of counselor's (93.98%) 2012 survey reported they are aware there are different measures for college ready and career ready.

Table 8

Are you aware there are different measures for college ready and career ready?

	Principal (n=119)		Teacher (n=1240)		Counselor (n=133)	
Yes	111	(93.28%)	1004	(80.97%)	125	(93.98%)
No	3	(2.52%)	98	(7.90%)	8	(6.02%)
Missing Response	5	(4.20%)	138	(11.13%)	0	

Table 9 depicts the principal, teacher, and counselor responses on are they aware a student must have three credits in a career pathway to be considered career ready? Of the principal's responses, 94.12% indicated that they are aware a student must have three credits in a career pathway to be considered career ready. There was a lessor percent of teacher's (67.74%) that reported they are aware that students who complete three or more credits in a career pathway are considered career ready.

There was a lessor percent of counselor's (90.98%) 2012 survey reported they are

aware that students who complete three credit bearing courses in a career pathway are

considered career ready.

Table 9

Are you aware a student must have three credits in a career pathway to be considered
career ready?

	Principal (n=119)		Teacher (n=1240)		Counselor (n=133)	
Yes	112	(94.12%)	840	(67.74%)	121	(90.98%)
No	4	(3.36%)	270	(21.77%)	11	(8.27%)
Missing Response	3	(2.52%)	130	(10.48%)	1	(0.75%)

Table 10 presents the information relating to your school gets more credit for

a student who is both college and career ready. Of the principal's responses, 96.64%

indicated that they are aware your school gets more credit for a student who is both

college and career ready. There was lessor percent of teachers (76.77%) that reported

they are aware your school gets more credit for a student who is both college and

career ready. There was a lessor percent of counselor's (90.23%) 2012 survey

reported they are aware your school gets more credit for a student who is both college

and career ready.

Table 10

Are you aware your school gets more credit for a student who is both college and career ready?

	Principal (n=119)		Teacher (n=1240)		Counselor (n=133)	
Yes	115	(96.64%)	952	(76.77%)	120	(90.23%)
No	0		148	(11.94%)	11	(8.27%)
Missing Response	4	(3.36%)	140	(11.29%)	2	(1.50%)

Dual Credit / Articulation.

Table 11 data presented depicts the principal, teacher, and counselor responses to the knowledge of: Are you aware CTE courses may count for college credit? Of the principal's responses, 89.92% indicated that they are aware CTE courses may count for college credit. There was a lessor percent of teacher's (62.74%) that reported they are aware CTE courses may count for college credit. There was a higher percent of counselor's (96.99%) 2012 survey reported they Are aware CTE courses may count for college credit.

Table 11

Are you aware CTE courses may count for college credit?

	Principal (n=119)		Teacher (n=1240)		Counselor (n=133)	
Yes	107	(89.92%)	778	(62.74%)	129	(96.99%)
No	8	(6.72%)	333	(26.85%)	3	(2.26%)
Missing Response	4	(3.36%)	129	(10.40%)	1	(0.75%)

Table 12 represents the communication the principal, teacher, and counselor have with local community/technical college and/or university. Of the principal's responses, 83.19% indicated that they communicate in regards to CTE articulation and dual credit. There was lessor percent of teacher's (34.03%) that reported they communicate in regards to CTE articulation and dual credit. There was lessor percent of counselor's (71.43%) 2012 survey reported they communicate in regards to CTE articulation and dual credit.

Table 12

Do you communicate with your local community/technical college and/or university, regarding? (Check all that apply)

	Principal (n=119)		Teacher (n=1240)		Counselor (n=133)	
CTE articulation and dual credit	99	(83.19%)	422	(34.03%)	95	(71.43%)
CTE transition to postsecondary	73	(61.34%)	365	(29.44%)	67	(50.38%)
Aligning the CTE curriculum	58	(48.74%)	247	(19.92%)	34	(25.56%)
Missing Response	11	(9.24%)	639	(51.53%)	28	(21.05%)

Table 13 presents the percentage of your students take advantage of dual credit and articulation opportunities for the CTE courses they are taking. Of the principal's responses, 50.42% indicated that only 0-24% take advantage of the dual credit and articulation opportunities for the CTE courses they are taking. There was a lessor percent of teacher's (42.50%) that reported 0-24% take advantage of the dual

credit and articulation opportunities for the CTE courses they are taking. There was

higher percent of counselor's (66.17%) that reported 0-24% take advantage of the

dual credit and articulation opportunities for the CTE courses they are taking.

Table 13

What percentage of your students take advantage of dual credit and articulation
opportunities for the CTE courses they are taking?

	Principal (n=119)		Teacher (n=1240)		Counselor (n=133)	
0-24%	60	(50.42%)	527	(42.50%)	88	(66.17%)
25-49 %	31	(26.05%)	223	(17.98%)	17	(12.78%)
50-74 %	17	(14.29%)	104	(8.39%)	17	(12.78%)
75-100%	3	(2.52%)	23	(1.85%)	9	(6.77%)
Missing Response	8	(6.72%)	363	(29.27%)	2	(1.50%)

Table 14 displays the responses to participating in PD relating to dual

credit/articulation. The principal, teacher, and counselor responded as follows. Of

the principal's responses, 58.82% indicated that they would benefit from participating

in PD concerning dual/articulated credit. There was a lessor percent of teacher's

(49.19%) that reported that they would benefit from participating in PD concerning

dual/articulated credit. There was a higher percent of counselor's (80.45%) 2012

survey reported they would benefit from participating in PD concerning

dual/articulated credit.

Table 14

Would you benefit from participating in PD concerning dual/articulated credit?

	Principal (n=119)		Teacher (n=1240)		Counselor (n=133)	
Yes	70	(58.82%)	610	(49.19%)	107	(80.45%)
No	46	(38.66%)	498	(40.16%)	24	(18.05%)
Missing Response	3	(2.52%)	132	(10.65%)	2	(1.50%)

Table 15 presents the principal, teacher, and counselor responses to the question: Are you aware the fastest growing jobs in Kentucky over the next 10 years will require some postsecondary education but less than a baccalaureate degree? Of the principal's responses, 82.35% indicated they are aware the fastest growing jobs in Kentucky over the next 10 years will require some postsecondary education but less than a baccalaureate degree. There was a lessor percent of teacher's (54.68%) that reported they are aware the fastest growing jobs in Kentucky over the next 10 years will require some postsecondary education but less than a baccalaureate degree. There was a lessor percent of counselor's (75.19%) 2012 survey reported that they are aware the fastest growing jobs in Kentucky over the next 10 years will require some postsecondary education but less than a baccalaureate degree.

Table 15

Are you aware the fastest growing jobs in Kentucky over the next 10 years will require some postsecondary education but less than a baccalaureate degree?

	Principal (n=119)		Teacher (n=1240)		Counselor (n=133)	
Yes	98	(82.35%)	678	(54.68%)	100	(75.19%)
No	17	(14.29%)	428	(34.52%)	33	(24.81%)
Missing Response	4	(3.36%)	134	(10.81%)	0	

Table 16 displays the results to the principal, teacher, and counselor understanding that CTE programs have business and industry partners? Of the principal's responses, 94.96% indicated that they are aware CTE programs have business and industry partners. There was a lessor percent of teacher's (72.10%) that reported they are aware CTE programs have business and industry partners. There was a lessor percent of counselor's (87.97%) 2012 survey reported they are aware CTE programs have business and industry partners.

Table 16

Are you aware CTE programs have business and industry partners?

	Principal (n=119)		Teacher (n=1240)		Counselor (n=133)	
Yes	113	(94.96%)	894	(72.10%)	117	(87.97%)
No	3	(2.52%)	214	(17.26%)	16	(12.03%)
Missing Response	3	(2.52%)	132	(10.65%)	0	

Program Availability.

Table 17 presents the principal, teacher, and counselor responses to the

question: Where do your students take career and technical education (CTE) courses?

(Check All That Apply). Of the principal's responses, 75.63% indicated that students

take courses at their high school. There was a lessor percent of teachers (69.92%)

that reported their students take courses at their high school. There was a lessor

percent of counselor's (84.96%) 2012 survey reported their students take courses at

their high school.

Table 17

Where do your students take career and technical education (CTE) courses? (Check
All That Apply)

	Principal (n=119)		Teacher (n=1240)		Counselor (n=133)	
Your high school	90	(75.63%)	867	(69.92%)	113	(84.96%)
An area technology center	79	(66.39%)	474	(38.23%)	84	(63.16%)
A career and technical center (District operated)	24	(20.17%)	253	(20.40%)	29	(21.80%)
KCTCS (Kentucky Community and Technical College System)	32	(26.89%)	342	(27.58%)	30	(22.56%)
Missing Response	3	(2.52%)	178	(14.35%)	2	(1.50%)

Table 18 presents the programs available to students. Of the principal's

responses, 89.08% indicated that higher percentage take Health Science courses. Of

the teacher's responses, 69.27% indicated that the higher percentage takes Business

and Marketing courses. Of the counselor's 2012 survey responses, 95.49% indicate

that the higher percentage takes Health Science courses.

Table 18

Which of the following programs are accessible to your students? (Check all that
apply)

	Principal (n=119)		Teacher (n=1240)		Counselor (n=133)	
Agriculture	74	(62.18%)	623	(50.24%)	107	(80.45%)
Business and Marketing	93	(78.15%)	859	(69.27%)	119	(89.47%)
Construction	78	(65.55%)	494	(39.84%)	100	(75.19%)
Health Science	106	(89.08%)	788	(63.55%)	127	(95.49%)
Human Services	29	(24.37%)	556	(44.84%)	78	(58.65%)
Information Technology	76	(63.87%)	681	(54.92%)	108	(81.20%)
Manufacturing	63	(52.94%)	319	(25.73%)	78	(58.65%)
Public Service	8	(6.72%)	108	(8.71%)	26	(19.55%)
STEM	43	(36.13%)	309	(24.92%)	47	(35.34%)
Transportation	56	(47.06%)	199	(16.05%)	63	(47.37%)
Missing Response	5	(4.20%)	193	(15.56%)	1	(0.75%)

Principal Interviews

Interviews with 12 high school principals that are in high performing high

school career and technical programs that result in high performance in meeting and

exceeding benchmarks on CCR data received from the TEDS coordinator in

Frankfort and the CTE CCR data sheets from KDE Website. The number to interview

was also based on 10% of responses from the principal survey.

The first question asked was: What process have you implemented for CTE students to reach CCR?

The responses received from the principals were consistent with information learned from the review of the literature. There was a general consensus that the schools had implemented clearly defined pathways that the students are following. The use of the ILP was used with the scheduling of students and setting up the master schedule in the schools.

The students were given the pathways when they register for classes that way they know what requirements are needed to be a completer in the program area and to be prepared for the state KOSSA exam or industry certification along with the academic needs to be successful. The schools have modified their bell schedules to accommodate and work with CTE students to meet all of their requirements. Some of the schools have framed posters of the pathways they offer and hang them in the hallways of the school.

Question 2 was: How do you monitor the process that you have implemented?

The principals made mention that the students are given a check sheet to keep track of the courses they have taken. This was for all courses taken in high school. The counselors also keep a check sheet of courses taken by each student along with a spreadsheet of all students to keep track of the progression toward CCR. The schools also have weekly calculations on student progression and post it in a work room that only teachers and administration have access to enter.

The students receive career guidance and for a few schools this was a new strategy that was implemented in the school. Counselors in some schools held a conference with every student to make sure they were aware of what they need to have and if there are any issues. Some of the principals indicated that they had to hire a college and career coach to work with students.

The third interview question asked of principals in high performing schools was: What interventions have you implemented and/or improved to help students accomplish industry certification or skills standards?

The principals indicated that teachers were administering tests to check student comprehension as they progress along the course. It was also mentioned that teachers were covering the curriculum that was required for students to be able to successfully take industry certification exams or KOSSA.

The schools have implemented individual goal setting with students to help guide them to reach their goals. Some principals indicated that they have 20 minutes of academic time geared for CCR interventions. The principals also mentioned the implementation of a flex period at the beginning of the day for students who need extra help in the areas they are struggling to meet CCR. Other principals indicated they have a 30-minute CCR time in the daily schedule to help students.

Most of the principals indicated that they have implemented a CTE night to help parents understand the importance of the programs students have the ability to take. The principals talked about the implementation of intervention on foundations where the students were pulled 1 to 4 times a week based on their need. RTI was

used and during that time soft skills were worked on with students. The principals

also indicated they have student's success recognitions events. In one school, the

staff has painted the name of the students on blocks in the hallway that gained a

success in a particular area.

Question 4 asked in the interview was: What training is available to teachers

and staff to assist with the process?

The principals mentioned that they educate the CTE teachers that they need to

teach all aspects of the curriculum, not just the parts they like. Some principals

mentioned that they make sure that teachers spend time in industry to stay current to

make sure that the curriculum is meeting the needs of industry.

All the principals mentioned an in house training to know the benchmarks for

CCR during staff meetings or on staff planning days. Teachers also receive training

on how to effectively perform RTI and work collaboratively. The principals

mentioned that all receive professional development related to educating staff to the

requirements of sequencing of courses offered for the programs taught.

During staff meetings the teachers receive training in house on career

pathways and how courses are sequenced. The principals said all teachers receive

professional development on advisor training to make sure the students are receiving

the proper information on sequence of courses. A couple of the principals made

reference to teachers receiving professional development on the awareness of the

importance of sequence of courses in pathways.

Some principals said they provide teachers with adequate professional development on the importance of sequencing of courses and how to advise students. Teachers receive training on understanding CCR benchmarks and the importance of sequencing of courses in career pathways.

In seeking to learn about student attitude towards the whole process related to career pathways, guidance counseling, course sequencing, and the whole issue of CCR, the question posed to the principals was: How have the students responded to the process?

The principals indicated that once the students began to understand the process, they were very receptive of the process. Principals indicated the students have been positive and see the importance of reaching CCR. The principals also indicated that the students are more aware of their test scores and were taking ownership of where they are in their CCR goal.

The final interview question asked of the 12 principals was: How have teachers/staff responded to the process?

The principals indicated that the teachers and staff were fearful of the process as they realized they did not have their curriculum down the way it should be. It was mentioned that the teachers have been receptive by having defined career paths as they see this is making the program stronger. All the principals said the teachers have worked hard on the processes to be able to help students. The teachers also were 100% bought in and behind the process implemented. The principals brought up that at first teachers thought it would be a big deal of work then they realized they have

already been performing these tasks. The principals indicated it has gotten better and

stronger with more support.

Chapter Five

Conclusions, Actions, and Implications

This chapter includes a summary of the study, the primary findings of the study, conclusions that were drawn from the findings, recommendations for further research, as well as implications of the study.

Summary

The purpose of this study was to analyze strategies used to enable high school career and technical programs to be high performing in Kentucky in meeting and exceeding CCR benchmarks. The theoretical framework and review of related literature was developed that supports the success of the student to achieve the CCR benchmark that is a nationally recognized education completion.

This study attempted to answer the research questions: What strategies are commonly implemented in high performing high school career and technical programs in Kentucky that impact schools meeting and exceeding college and career ready benchmarks? What strategies are implemented at the high school level to meet the needs of CTE programs?

The population selected for this study were high school principals (n = 300) that offer CTE programs in their schools. The principals received an email that included an introduction to the study and a request to participate in a survey. After the CCR data report was released by the state and TEDS data relating to the 2012-2013 and 2013-2014 school years were received from OCTE TEDS Coordinator, the various data were used to compare the progressions of the schools CCR ranking.

From the rankings, the top 12 high performing schools were identified and principals were contacted for interviews to discuss the process they have implemented for success.

The teacher population for the survey was all Kentucky high school teachers (n=13,024) to gather information on their knowledge and understanding as related to CTE and CCR. The teacher information from the survey was used in the comparison to see how the teachers knowledge about CCR and CTE.

The counselor information came from the OCTE survey that was administered in 2012 to high school counselors (n=133 respondents) and compared the information from this survey with the survey responses of principals and teachers for understanding of CCR.

The survey instruments used were administered through SurveyMonkey to the identified population for the study. The surveys consisted of 17 questions. The first question was the acknowledgement and acceptance to be a part of the survey. The last question was an open ended response that the respondents could answer: What assistance do you need to help get students career ready? The survey was available through an email to the perspective participants for a total of 4 weeks, with a reminder email sent in regard to the survey at the end of the second week, to both groups principals and teachers. The researcher received 119 principal responses and 1,240 teacher responses from the administered survey. In addition, the 133 counselor responses from the OCTE's survey administered in 2012 were obtained for

comparison with the principal and teacher responses. These responses are found in

Appendix D for principals and Appendix E for teachers responses.

Findings

The findings from the results of the surveys administered show that the

understanding of the principal, teacher, and counselor in the high schools that are

working to have their students reach the CCR benchmark. The results of this study

are reflective of the review of research on Career Clusters, Career Pathways, Program

of Studies (Hull, 2008), Course Sequencing (Cook, 2004), Leadership (Daggett,

2012), Accountability (Barbee & Bouck, 1974), Collaboration/Relationship

(McGrath, Donovan, Schaier-Peleg, & Van Buskirk, 2005), and Advising/Counseling

(VanVillsa, 1995; Mei, Wei, & Newmeyer, 2008). These results indicate that schools

adopting the recommendations can have high performing Career and Technical

Education Programs. The results did not indicate a relationship with Problem Based

(Daggett, 2012; Mergendollar & Larmer, 2010), and Application/Project Based

(Gorlewski & Gorlewski, 2012; Hull, 1995) learning that would result in high

performing Career and Technical Education Programs.

Research Question 1: What strategies are commonly implemented in high

school career and technical programs in Kentucky that impact schools meeting and

exceeding college and career ready benchmarks?

The information obtained from the principal survey and were compared to the

counselor's 2012 survey results obtained from OCTE for the question: Do you use

career pathways in scheduling students? A high percent of principals (87.39%) and

counselors (69.92%) indicated that career pathways were used when scheduling

individual students. The teachers response to their question which was worded

slightly differently was: Do you have input on career pathways in scheduling

individual students? Teachers response (57.98%) was that they did not have any

input on career pathways in scheduling with individual students. The teachers based

on the response indicate they do not participate in helping schedule students. The

teachers should be a major component to help schedule students. Teachers are the

individuals that provide the pathways and what the sequence of courses for the

program are along with making sure the student takes the proper class in sequence.

There was, however, a discrepancy in the responses for the question

concerning: How do you use career pathways in developing the master schedule? A

high percent of teachers (77.44%) and counselors (40.81%) indicated that student

course request drives the master schedule compared to 44.54% of the principals.

However, 59.66% of the principals indicated that career pathways were a driving

force in the development of the master schedule compared to 17.29% of the

counselors. From these results, it appears that principals are having a greater role in

the development of the master course schedule compared to counselors.

The respondents were asked to indicate how the ILP was used to help

schedule students by the principals, teachers, and counselors. In the principal

interviews the principals described the use of the ILP along with career pathways to

schedule students.

Responding to the statement, "The ILP could be a valuable tool but I don't have time to use it", 32.77% of the principals, 42.86% of the counselors and 31.53% of the teachers agreed with the statement (Table 4). Although the ILP is a Kentucky requirement for all students and is designed to assist in the education plan of the students, the results indicated that not all schools are using the ILP to assist in the scheduling of students.

There was an overwhelming majority of the principals (94.96%), teachers (61.85%), and counselors (87.22%) that knew there was a sequence of courses that should be offered for the various career pathways offered in their schools. However, based on the responses by the teachers and counselors on the scheduling being based on student requests to drive the master schedule, it was indicated that the course sequencing was not being followed (Table 3).

There was an overwhelming majority by the principals (94.12%), teachers (67.74%) and counselors (90.98%) on the question: Are you aware a student must have three credits in a career pathway to be considered career ready? Based on the response form the respondents they all understand that you have to have completed three courses in a career pathway for the student to count in the CCR. The principals, teachers, and counselors have the knowledge that the student has to have the proper courses in a pathway to be considered for career ready. In the interviews with the principals they also indicated that they were aware that the taking of KOSSA or an industry certification for the proper pathway is what makes the student career ready.

There was a strong agreement on the question: Are you aware CTE courses may count for college credit? The principal (89.92 %) response, teachers (62.74%) response, and counselors (96.99%) response have shown that CTE students have the opportunity to receive college credit for certain courses while taken in their pathway. According to the survey findings, about 50% of the principals and 66% of the counselors indicted that less than 25% of the students in the school take advantage of dual credit and/or articulation opportunities for CTE courses being taken. Currently, the push in many high schools is to offer opportunities for students to receive credit in institutions of higher learning while still in high school. The findings of this study shows that while dual credit and articulation opportunities exist, there needs to be an increase in the percent of students taking advantage of this opportunity in CTE courses.

Principals (82.35%), teachers (54.68%) and counselors (75.19%) responded in the affirmative that they are aware the fastest growing jobs in Kentucky over the next 10 years will require some postsecondary education but less than a baccalaureate degree. With this information the schools should be working with postsecondary institutions to make sure the students are in proper pathways and taking the required sequence of courses to help meet the desired career the student is working toward.

Responding to the question: Are you aware that CTE programs have business and industry partners?, principals (94.96%), teachers (72.10%), and counselors (87.97%) responded "yes". For students to be successful the CTE programs have to work with business and industry to make sure they are teaching the needs of business

to prepare students to be successful and meet the career readiness requirement in school.

There was a mixed response to the question: Do you communicate with your local community/technical college and/or university, regarding? The strongest response by principals (83.19%) and counselors (71.43%) indicated they are in contact in regards to CTE articulation and dual credit. The teachers highest respondents (34.03%) communicates about CTE articulation and dual credit. The next response by all groups was CTE transition to postsecondary principals (61.34%), teachers (29.44%), and counselors (50.38%) and the least was aligning the CTE curriculum (see Table 12). For the students to receive the dual credit or articulation there should be an almost equal response for aligning the CTE curriculum with the postsecondary institution. If the courses are not aligned then the students will not be able to receive the college credit offered through the agreement of the articulation or dual credit which ever is available to the students.

With the response by the principals (96.64%) , teachers (76.77%), and counselors (90.23%) for the question are you aware your school gets more credit for students who are both college and career ready. By having the students achieve both college and career ready the schools CCR percentage was higher at a point and a half and the student would not have to take remediation classes at the postsecondary level.

Response from principals, teachers, and counselors (Table 17) on where do your students take technical (CTE) courses. The highest response was their high school average of 76.84% second highest was at an area technology center with an

average of 55.93%. With the highest percent of CTE courses taken in the high

school, the student should be able to meet the career readiness requirement related to

their pathway.

There seems to be a distribution of programs (Table 18) offered in the schools

based on the responses. The question related to this is which of the following

programs are accessible to your students? The areas of the top five are Health

Science average of 82.71%, Business and Marketing average of 78.96%, Information

Technology average of 66.66%, Agriculture average of 64.29%, and Construction

average of 60.19%. These programs had the highest responses that the schools are

offering pathways to students to meet career interest goals and the ability to meet the

CCR benchmarks for accomplishments for the school and the students.

According to the survey, the average GPA of students enrolled in CTE

courses is between 2.5 and 3.4. Oddly, it appears that no student with a GPA of 3.5

or higher or students with a GPA less than 2.5 are enrolled in CTE courses. Based on

the responses, it seems that CTE programs are attracting students with an "A" to "C"

grade average.

Research Question 2: What strategies are implemented at the high school level

to meet the needs of CTE programs?

The comments received from the principal's interviews revealed the major

strategies that were implemented at the high school to meet the needs of CTE

programs. Those strategies include (1) clearly defined pathways that include the

sequence of courses that the students have to take. The pathways help to setup the

master schedule to meet the needs of the students to complete the required courses as

defined in the pathway. The schools have worked with the staff on proper sequencing

of courses and the importance of this process to make sure that the students are

successful. The pathways are distributed among the students and on display

throughout the schools. This is so students can see what courses they have to take,

including academic and CTE, to be a preparatory student and be able to take either

the KOSSA exam or an industry certification that will help to meet the career

readiness section.

The schools also initiated (2) a tracking process for the students and the

school to use for scheduling and CCR progress. The tracking was a check sheet that

had the pathway the student is enrolled in and is able to see at a glance what courses

that have been taken and what needs to be taken and in which sequence. The

academic courses are also listed on the sheet so the student sees all courses needed for

each year they are in high school.

The schools implemented (3) a dedicated RTI time to help the students with

any area in which they were struggling. The schools mentioned that they would set

up certain courses for the students to help them increase their comprehension in the

areas of math and/or reading. The time set for this would be a rotating time that the

students would get support and able to stay current in their regular classes.

Along with having these strategies in place, (4) students were enabled to take

ownership on their educational process and could tell you where they were in terms of

reaching their CCR goal. The strategies that the schools have implemented have

raised the teacher receptiveness in the process and have taken to them with great

support and belief. With the strategies and all parties involved working together has

been one of the success for the schools at meeting the CCR requirements and being in

the top percent in the state.

Conclusion

The information that were gathered and analyzed extensively shows that the

schools still have a disconnect in classes drives the master schedule but does not help

them complete the required courses for the scheduling of students based on the

surveys of counselors and teachers. The survey showed that student request of

pathway. The findings from the surveys and interviews indicate the inadequacy of

proper planning and scheduling for students. A more deliberate attempt is needed in

the development of the master schedule to ensure that students are following the

prescribed sequence of courses to meet industry related certification.

Previous research along with the responses of teachers and counselors also

indicates that students may have a difficult time obtaining CCR status. There should

be a developed set of pathways for students to follow. The students should know

what is required for them to become CCR their senior year in high school. This was

also signified in the interviews with principals where all the schools that have had a

proven progression of improvement in the CCR ranking that maximizes on both areas

of career components as well as the academic requirements. These schools have

made a point to distribute the pathways to students and parents to inform them on

what it will take to meet the requirements for the pathway. The schools also display

the pathways in the form of posters in the hallways at the schools to keep the

requirements as a constant reminder for all. The commonality of the top 12 schools

the distribution of the career pathways and displaying them to keep everyone

knowledgeable as to what is required for each pathway.

 Based on the results from the survey relating to dual credit and articulation

agreements, the results suggested that PD would benefit the groups to better

understand the importance of working with postsecondary education. The PD should

include the importance and requirements that the high school programs that have

either a dual credit and/or articulation agreement(s) with a postsecondary institution

have the high school courses offered in alignment and proper sequencing. By

communicating and working with the postsecondary institution will make a difference

as to whether the agreement will be honored or not. The purpose of the sequence of

the course and that the curriculum taught in the course need to be aligned so that the

students will actually receive this same type of education they would receive as if

they were in the college class. In the principals interview, responses indicated the

need to provide PD on career pathways, course sequencing , and CCR benchmark

requirements.

 The programs must meet the fastest growing jobs needs and those that require

some postsecondary education and less than a baccalaureate degree. In addition,

teachers need to be working with their business and industry partners to make sure

that the schools are meeting the partner's needs for the skills that their future workers

should possess.

Schools should also consider the GPA of students that are pursuing the technical programs needed by business and industry. Students that have a lower GPA do not always have the ability to meet the newer requirements related to the technologically advances in areas that are required by business and industry. The programs offered to students in the schools should be examined and evaluated to determine if the programs are meeting the needs of business and industry. If these programs do not provide a positive correlation for business, then they should be reexamined to determine if they are vital to the students to help prepare them for moving into employment. Principals had indicated that to improve industry certification and KOSSA passing for students, teachers should be covering the required curriculum, and are helping students set goals for achieving industry certification.

Recommendations

Based on the review of the literature, and the findings and conclusions of this capstone, the following recommendations are presented to assist schools in meeting the current College and Career Ready benchmarks.

1.   All school related individuals involved in scheduling receive professional development on how to properly schedule students taking CTE career pathways.

2. Provide professional development to enhance skills on how to communicate and align the curriculum to enable the establishment of dual credit and/or articulation agreements with postsecondary institutions so

student can begin earning college credits or industry standard certifications.

3. Provide professional development on working with business and industry and industry certifications. The professional development would include local industries and what they produce or what services they provide including the types of jobs/positions they employ. The skills that the employee would need to be successful in that business or industry. What the technical skills are needed along with academics to successfully pass and obtain a valid industry certification for the local business and industry.

4. Further research should be conducted to investigate and determine the impact of the instructional leadership style and abilities of high school principals with regards to the administration of career and technical education programs.

5. A longitudinal study (3 to 5 years) of the participants in this study could be interesting to see if their understanding of the importance of scheduling based on career pathways and it's impact related to high school career and technical programs to be high performing in Kentucky in meeting and exceeding CCR benchmarks.

Concluding Remarks

Based on the findings of this study it has been shown that there is a disconnect with schools and how they look at CTE programs and the proper way of scheduling students. The schedule needs to meet the requirements to progress the students to be

preparatory status so that they are able to take either KOSSA or industry certification and academic portion to meet the CCR benchmarks. Instead, the survey indicated that students request for classes' drives the master schedule. This process does not help the students receive the proper instruction needed to be successful.

The schools should look into offering professional development on career pathways and the importance of sequencing of courses. This information will help all aspects of the educational process of students and planning for teachers. The teachers would know what courses they are teaching and when they will be offered based on the pathways and frequency to meet the needs of the students.

There should be professional development on the importance of aligning curriculum and communicating with postsecondary institutions to setup dual credit/articulation agreements between schools for the benefit of the students.

Students are offered the option to take programs based on the career clusters that are offered at their school or an Area Technology Center. There are many programs offered to meet the desire of most students. The results also indicated that the average student taking CTE courses have an average GPA range of 2.5 to 3.4. What is missing is giving the opportunity of the higher GPA students the option to take CTE courses as well as they will be taking college classes in a lot of the programs offered while in high school. The lower GPA students also need to be introduced to these programs to help them learn that they have the ability as well to accomplish learning a career that they can use in life to be self-sufficient.

I would like to see that the schools in the next 3 to 4 years are taking into consideration and looking at the information that is available to them to help setup a protocol to work with scheduling students. The schools need to offer professional development for all staff and educate the parents as well as to what is available for their children and how it can benefit them in the future. Schools need to have an open communication with postsecondary institutions to offer dual credit or an articulation agreement for students to partake in. The schools should develop a strong connection with business and industry to make sure the needs of industry are being met by the education of the students. None of this can be accomplished if the administration in the schools, along with the central office staff, are not willing to make changes to benefit the education and advancement of the programs to meet the needs of the students.

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APPENDICES

Appendix A

Principal Survey

1. Your consent to participate in this study will be indicated by you choosing one of the items below.
    o   Yes I understand that I am willing to participate in this study and no personal information will be used
    o   No I do not wish to participate in this study and can exit now.

2. Do you use career pathways in scheduling individual students?
    o   Yes
    o   No

3. Are you aware students who successfully complete three or more courses in a career pathway are more likely to graduate from high school than those who do not?
    o   Yes
    o   No

4. How do you use career pathways in developing the master schedule? (Check all that apply)
    o   Career Pathways are generally not considered
    o   CTE Teachers submit course offerings
    o   Student course requests drive master schedule
    o   Career pathways are a driving force in developing the master schedule

5. The ILP
    o   could be a valuable tool but I don't have time to use it
    o   is an unnecessary tool
    o   is used at my school to help schedule students

6. Are you aware of the sequence of courses for the career pathways offered at your school?
    o   Yes
    o   No

7. Would you benefit from participating in PD concerning dual/articulated credit?
    o   Yes
    o   No

8. Are you aware there are different measures for college ready and career ready?
   - o Yes
   - o No

9. Are you aware a student must have three credits in a career pathway to be considered career ready?
   - o Yes
   - o No

10. Are you aware CTE courses may count for college credit?
    - o Yes
    - o No

11. Are you aware the fastest growing jobs in Kentucky over the next 10 years will require some postsecondary education but less than a baccalaureate degree?
    - o Yes
    - o No

12. Are you aware CTE programs have business and industry partners?
    - o Yes
    - o No

13. Do you communicate with your local community/technical college and/or university, regarding (Check all that apply)
    - o CTE articulation and dual credit
    - o CTE transition to postsecondary
    - o Aligning the CTE curriculum

14. Are you aware your school gets more credit for a student who is both college and career ready?
    - o Yes
    - o No

15. Where do your students take career and technical education (CTE) courses? (Check All That Apply)
    - o Your high school
    - o An area technology center
    - o A career and technical center (District operated)
    - o KCTCS (Kentucky Community and Technical College System)

16. Which of the following programs are accessible to your students? (Check all that apply)
    o Agriculture
    o Business and Marketing
    o Construction
    o Health Science
    o Human Services
    o Information Technology
    o Manufacturing
    o Public Service
    o STEM
    o Transportation

17. What is the average GPA of students you enroll in a CTE program?
    o Less than 2.5
    o 2.5 – 2.9
    o 3.0 – 3.4
    o 3.5 or higher

18. What percentage of your students take advantage of dual credit and articulation opportunities for the CTE courses they are taking?
    o 0-24%
    o 25-49 %
    o 50-74 %
    o 75-100%

19. What assistance do you need to help get students career ready?
    Open-Ended Response

20. Would you be available for follow-up questions? If so, please put your name, phone number, and email address in the box.
    Open-Ended Response

Appendix B

Teacher Survey

1. Your consent to participate in this study will be indicated by you choosing one of the items below.
    o   Yes I understand that I am willing to participate in this study and no personal information will be used
    o   No I do not wish to participate in this study and can exit now.

2. Do you have input on career pathways in scheduling individual students?
    o   Yes
    o   No

3. Are you aware students who successfully complete three or more courses in a career pathway are more likely to graduate from high school than those who do not?
    o   Yes
    o   No

4. How are career pathways used in your school for developing the master schedule? (Check all that apply)
    o   Career Pathways are generally not considered
    o   CTE Teachers submit course offerings
    o   Student course requests drive master schedule
    o   Career pathways are a driving force in developing the master schedule

5. The ILP
    o   could be a valuable tool but I don't have time to use it
    o   is an unnecessary tool
    o   is used at my school to help schedule students

6. Are you aware of the sequence of courses for the career pathways offered at your school?
    o   Yes
    o   No

7. Would you benefit from participating in PD concerning dual/articulated credit?
    o   Yes
    o   No

8. Are you aware there are different measures for college ready and career ready?
   o Yes
   o No

9. Are you aware a student must have three credits in a career pathway to be considered career ready?
   o Yes
   o No

10. Are you aware CTE courses may count for college credit?
    o Yes
    o No

11. Are you aware the fastest growing jobs in Kentucky over the next 10 years will require some postsecondary education but less than a baccalaureate degree?
    o Yes
    o No

12. Are you aware CTE programs have business and industry partners?
    o Yes
    o No

13. Do you communicate with your local community/technical college and/or university, regarding (Check all that apply)
    o CTE articulation and dual credit
    o CTE transition to postsecondary
    o Aligning the CTE curriculum

14. Are you aware your school gets more credit for a student who is both college and career ready?
    o Yes
    o No

15. Where do your students take career and technical education (CTE) courses? (Check All That Apply)
    o Your high school
    o An area technology center
    o A career and technical center (District operated)
    o KCTCS (Kentucky Community and Technical College System)

16. Which of the following programs are accessible to your students? (Check all that apply)
    o   Agriculture
    o   Business and Marketing
    o   Construction
    o   Health Science
    o   Human Services
    o   Information Technology
    o   Manufacturing
    o   Public Service
    o   STEM
    o   Transportation

17. What is the average GPA of students that are enroll in a CTE program?
    o   Less than 2.5
    o   2.5 – 2.9
    o   3.0 – 3.4
    o   3.5 or higher

18. What percentage of your students take advantage of dual credit and articulation opportunities for the CTE courses they are taking?
    o   0-24%
    o   25-49 %
    o   50-74 %
    o   75-100%

19. What assistance do you need to help get students career ready?
         Open-Ended Response

Appendix C

Principal Interview Questions

The schools that have had consistent increase in career ready student data.

1. What process have you implemented for CTE students to reach CCR?

2. How do you monitor the process that you have implemented?

3. What interventions have you implemented/improved to help students accomplish

    industry certification or skills standards?

4. What training is available to teachers and staff to assist with the process?

5. How have the students responded to the process?

6. How have the teachers/staff responded to the process?

Appendix D

Principal Open Responses

- Better pathways from the state.

- We need to get everyone on the same page. We need to orient students to the careers choices they have once entering the workforce. We as an educational system do a poor job of guiding students toward their strengths. We are not truthful when it comes to students postsecondary capabilities, mainly because we don't want anyone to realize our own educational failures.

- More Industry certification information

- We are in the process of adding a couple different career pathways to our program at this time. We definitely see the benefits of preparing students to be career ready.

- Continuous flow of information regarding pathways and assessments for technical and academic leg of career readiness.

- PD

- The academic piece

- data collection

- Better understanding of career pathways maps to show staff.

- Additional intervention instructors to work with targeted groups of students with skill deficits.

- As a very small school district with just one content teacher in each high school area, we struggle to find teachers certified in needed English, Math, Science, etc… and then with additional certifications in CTE courses. We need more ways to link to other districts who offer courses or pathways that we don't offer. We have had similar conversations with staffs from other small and independent districts. EPSB requirements for certified CTE areas limit our flexibility in what we can offer.

- Getting our feeder high school focused on career pathways and the new CTE program of studies has been somewhat of a challenge. We are working in that direction; however, we are not there as we only have about 45-50% of seniors that are preparatory.

- Requiring the counselors at the high school to meet with students and schedule ALL junior and senior students (at a minimum) to choose and follow a specific career pathway.

- High school counselors to use pathways for scheduling. Students that come to center that are not all IEP's....

- Need for there to be more targeted scheduling of students in pathways instead of allowing them to bounce around all over the place. High Schools treat them like they are still exploring.

- To lower the graduations requirements for high school students. This would allow more students the freedom to enroll in more OCTE classes.

- Better advising at the high school

- training for teachers and counselors

- BETTER TEACHER PREP OF LESSONS

- The Area technical centers should be aligned with the same career accountability as the high schools. The success of the ATC should be based on passing the KOSSA test and passing their industry certifications.

- offering and training of industry certifications

Appendix E

Teacher Open Responses

- Better education of what there is to offer students

- I need to have this term defined

- I don't know the first thing about it. So I guess I'd have to start at Square One.

- More professional development.

- Any Training would help.

- Teachers need the information formatted in a rubric so we can help students make decisions about careers and college.

- As a math teacher who teaches a CTE based transitional senior math class, I could use a textbook that centers on content needed to benchmark on the COMPASS, KYOTE or ACT that creates its conceptual framework in CTE related problems rather than focusing on preparing students for further study of pure mathematics. For these students, the end of the road will likely be college algebra or a problem solving course as undergraduates, so preparing them for that, rather than pre-calculus or calculus. I should mention that the entire reason I would like the text is that planning an entire course in CTE without having taken any is difficult, and while collaboration with CTE teachers has helped, the time factor has made everything very difficult.

- A checklist divided by category for each career

- Knowledge of Career programs available

- Dual Credit PD (4 identical responses)

- We need more of our faculty members and administration to understand the importance of Career Readiness. Also, they need to understand the process that needs to take place when completing pathways to become Career Ready.

- I think that since many "required" courses are offered throughout the day, if our counselors would schedule CTE courses first and then fill in the required we would have a broader audience that would be in our programs.

- Counselor knowledge and awareness of the available programs. Public awareness of the career opportunities in manufacturing and an awareness campaign that puts an end to the stigma of a career in manufacturing and other CTE programs. We need our academic educators and administrators to understand that college is not a final destination and all our students must be career ready! We need our counselors and administrators to give recommendations about careers and college education that make sense; way too many young people spend thousands of dollars in a four-year college and are no more prepared for an actual career than the day they graduated high school.

- Professional development for those working in an alternative setting that does not have access to all CTE pathways. Best ways to get our students career/college ready.

- Speakers from the industry - Corporate

- Our school is not staffed for career readiness. That would be the start.

- Would be good to have an expansion of CTE pathways.

- Special Ed students need training/courses leading to actual employment. (Something practical).

- professional development on choices/opportunities for our students

- More resources that will provide future employment directly after high school. A list of potential businesses that would be willing to come in and speak with students in order to inform them of the soft skills and well as technical skills that are needed to perform their trade.

- Cooperation from the counselor's office

- Guidance counselor who knows what they're doing...

- I need students to have the opportunity to explore different options and grow into themselves during their high school years rather than declare a major at age 13 and be limited in their class offerings because they were forced into a niche before they had developed an adequate level of self-awareness

- Professional development for teachers

- Readings or information to get the students motivated

- More backing from administration and counselors in promoting CTE based on ILPs

- Getting Principals and Superintendents to get on board with making some of the classes required to make the students career ready.

- Get more students enrolled in CTE classes

- continued support and information-job shadowing opportunities

- I'm a new teacher so anything they tell me would help.

- A clear and concise lay out of each course of studies.

- So much of this is done through the counseling office...teachers have very little input with this.

- More opportunities for Industry Externships. -More emphasis on project based instruction

- Administrative support for our programs.

- More awareness by guidance counselors in developing career pathways - relevance of ILP in schedule planning

- Overall education community needs to understand and support being career ready as an important need, just like being college ready. If you're both you will be truly as successful as possible.

- As a classroom teacher, I don't feel as though I need any help, but I would also like to point out that as a parent, I do not appreciate the school forcing a child to take a career path that he or she is not interested in simply to get the extra half a point on the school score.

- More clarity on which elective courses can count toward a pathway completion and whether a course must have a "pathway" number or just be similar content taught is needed. For example, can Financial Literacy count

for Business if coded as Math? Can Leadership Dynamics count for Family and Consumer if coded as Marketing?

- As a Tech Center we need to have morning and afternoon students instead of 7 periods a day at 50 minutes long....we cannot teach a trade in 50 minute sessions and I feel it is a great injustice to our students who are trying to learn a trade.

- Articulating with four-year colleges.

- More information about the programs

- I would like to have up-to-date resources for the student and family to go over together.

- more information regarding fastest-growing jobs in KY and specifically how high school core content classes guide students toward those jobs

- Input from the community college system and a willingness to collaborate with businesses and programs.

- Our school focuses CCR on quarters. Students who need more than one quarter of test prep Lose out on additional help. If students could sign up for test prep courses rather than be randomly placed it would help.

- I work with a Core Content class and I teach freshmen only, so I have some contact with the Career Ready classes and instructors but I am not very involved in this effort in our building. I work on the literacy needs and the

speaking and listening portion of my content as well as working in some

informational texts but there is very little collaboration between disciplines.

- We need to better educate parents about the opportunities available. We also

  need to qualify and guide the students into programs they are interested in as a

  career. We are getting better at this and much more focus is going into putting

  students into the right classes and helping them to make the right choices.

- More information on CTE

- I don't know anything about this program other than students are pulled out of

  class on a routine basis via phone calls, emails, and other means that interrupt

  class instruction. I feel we need more information without yet another PD

  being required on our parts.

- On-going parental input and support. Support from Colleges/universities.

- I'd like some PD so that I know what I am doing since I am not certified CTE.

- Postsecondary contacts/connections willing to make it happen.

- high school to help align schedules for classes

- More info on upcoming pathways

- better knowledge of school courses available

- Students who are taking college prep classes do not have time to take the CTE

  classes, though they may want to.

- KDE support of CTE programs

- Help with culture/changing community mindset, motivating parents.

- More direct training and how to implement in classrooms regularly.

- I firmly believe that for students to see the significance of being both college and career ready, more businesses and technical schools need to have systematic representation at high schools (all four levels). This representation could stress the significance of the basic skills necessary to be successful and how they are used in their particular area.

- A comprehensive program of safety nets for students who are behind grade level in math and reading.

- Admin support

- focus on enrolling students in certain classes based on their declared pathway and not using those classes as a filler elective for students who have no interest in that particular pathway.

- I would like more information on services and opportunities that are available for students with IEPs.

- We need to educate guidance counselors, administration and curriculum coordinators who to plan and implement career pathways.

- We do not have ANY assistance and therefore only offer College Ready prep.

- Scheduling assistance and credit monitoring

- I am at a new school, so I will have to learn how the process works here; what is in place. As a language arts teacher, I am generally aware of how my content is related to career readiness and I am aware of local commerce and

industry and how that relates to our students. Any initiatives that will

reinforce students' transition from high school to specialized training or the

work force would be a plus for them and the community.

- More parent awareness on this issue of CCR and more parent participation.

- Counselors not "dumping" students into courses that are uninterested, not on

  grade level for reading and math,

- More information CCR and cross curricular planning with academics and

  CTE.

- More training/information about what employers see as needs for incoming

  employees.

- Math tutoring would be helpful

- More emphasis in early reading programs. Students in our high school show

  up 2-5 grade levels behind in reading.

- More PD in this area of CTE and CCR

- INFORMATION on all aspects of CCR!!!!

- Since there are multiple academic measures I need a clear explanation of those

  assessments.

- More than just the acronym and cool posters asking "Are you college and

  career ready?" I can't teach what I don't know about, so having PD's that

  explain to classroom teachers what they can do to encourage students to take

  classes toward their career would be most helpful. It would also help if

teachers knew what College & Career courses are needed so that we can get the training to offer those courses.

- Career Counselor responsible for all CTE students.

- A different class schedule so that my students can take more electives.

- Making sure the students take the correct sequence of classes that the state has mandated WHICH should have a bit more flexibility and not tie kids into such a narrow choice of classes.

- Our students earn industry certificates and do well on the KOSSA, but we need the programs to be promoted more and the students to be more aware of the benefits. We go over the colleges we are articulated with but if a student doesn't have our class they don't get the info.

- A better understanding from Non CTE employees (Administrators, Math Science , English Teachers) on the importance of Career Ready.

- Better scheduling.

- Support from our local school board

- What our district offers for our students and time to discuss it with them.

- PD for teachers on SPECIFICS of program & how it benefits students

- Implementation of Career Pathways to help drive students schedules.

- More information about college and high school partnerships

- PD on what our school offers and how I can connect my content to those classes so the students are interested in my class based on their career path.

- Better assistance from the High School Counselors.

- Help teaching counselors that they need to schedule elective courses first then schedule core classes so student can get what they need in their pathways. Students come to school when they are learning what they are passionate about.

- Targeting student pathways early enough to get them 3 credits in a specific area. They often change after 1 or 2.

- Assistance from other teachers to help emphasize CTE in their teaching...

- better guidance counselors

- More cooperation with the counseling department--students are scheduled in part B before part A, required courses have been left off the master schedule, for an entire yr. so seniors cannot complete the pathway and also have a lower percentage chance to pass the career ready exams

- As a CTE teacher we need to have more input as to students and classes they are enrolled in. We always end up with students who are not aware of what the class is. They are placed in here to be babysat at times. This takes away from students who want to learn and obtain certification. The Counselor and Principal at the feeder school place student in classes.

- More one on one instruction/guidance to children entering high school on pathways/options.

- I don't teach any CTE classes, so my role would be to help them stay motivated to finish their education.

- more information about college and career readiness

- Additional training on career pathways.

- A better description and promotion at the 8th grade scheduling level. We are missing students that should be in our program and getting too many that fall out.

- Considering the Area Technology Centers only have a Principal and Secretary for administration, all ATC's need a career counselor to lead students in the right career pathways to make them successful upon graduation.

- Alignment of career pathways in a logical order. Counselors do not understand career pathways and usually have students in CTE classes in a random fashion.

- Increased emphasis on the CTE offerings. Students in the middle schools need to visits the school to see what courses are available before scheduling with their counselors. Possibly a parents night for these same students so that the opportunity is explained well.

- Our problem is a scheduling problem.

- Administration needs to make it a priority.

- PD for the High School Guidance counselors and their Principal

- Regular meetings with students to make sure students are on the correct path.

- More articulation and duel credit information.

- To be part of a student's overall career pathway.

- Assistance from the High School teachers and staff would be of great assistance to our school. It seems they are not "sold" on the importance of the Area Tech Centers in helping students to achieve and excel in their career endeavors. When Career Ready students are even mentioned at Teachers Meeting we attend at the high school, most of them just "roll their eyes" and "shake their heads".

- EVERY student in a CTE program needs a guidance counselor who leads them in that direction. Unfortunately, the guidance counselors in the school tend to push "college" readiness but overlook the students who are interested in career-readiness certifications.

- More input on who takes my classes.

- School holding kids to a pathway unless all parties (student, parent, teacher, and counselor) agree. We have many students who take 1 or 2 courses from multiple programs.

- Consistency from the state on which courses are in pathways. They seem to change frequently.

- Getting the message out to students and parents at an earlier point in their high school career.

- Assistance setting up business and industry advisory committees.

- I would love to learn more about implementing this into my school and curriculum. It seems like a great idea to get student motivated and the college credit is a nice touch! Look forward to learning more!

- This was sprung on us without much preparation. I'd like to know the ends and outs of how the college and career ready works.

- Informing the students of the importance of career readiness.

- I would be interested in a PD on how core content can be aligned to career readiness (particularly in English), in addition to college readiness.

- Better understanding by teachers and staff at schools to understand basically all the questions you contained in this survey! Teachers still do not have a clear understanding of the requirements to become career ready/Industry Certifications, KOSSA/Academic Requirements and the misconception that career ready status is LESS than college ready.

- For students to realize the benefit of doing it now.

- Clearer and more information on vocational/technical options, dual credit, participating postsecondary institutions, how GEAR UP in Kentucky might do a better job to help students take the next steps in following a career pathway in vocational or technical education.

- More involvement in the entire process of scheduling and selecting course offerings.

- To know more about the dual offerings and programs

- Administrators who understand CCR

- A more understanding of the CTE curriculum.

- Counselors scheduling students in the correct classes. We are used as an elective and anyone is placed in the class, the pathway is not followed.

- Aligning core content classes to CTE classes.

- I need counselors to enroll students in my level 1 class who are 9th or 10th grade so they can actually complete the program. I consistently get upper classmen in level 1, taking seats from 9th and 10th graders, leaving me with few completers at the end of year 4.

- Greater parental support and understanding; cooperation from counselors when scheduling so that course sequences are followed

- School to provide the CTE classes within the schedule that allow student to become college career ready- admin ONLY goes by where they can put kids and to make a workable schedule- recommendations by CTE teachers are not considered

Appendix F

School 2011 2012	Total Enrolled 2011 2012	Total Enrolled 2012 2013	Total Enrolled 2013 2014	Prep Seniors 2011 2012	Prep Seniors 2012 2013	Prep Seniors 2013 2014	ASVAB 2011 2012	ASVAB 2012 2013	ASVAB 2013 2014	WorkKeys 2011 2012	WorkKeys 2012 2013	WorkKeys 2013 2014
ADAIR CO HS	140	182	177	58	53	72	13	5	21	43	29	58
ALLEN CO AVEC	219	202	169	91	95	87	3	18	42			15
Allen Central High School			49			20			5			11
ALLEN CO HS	186	167	149	73	71	57	4	20	18		2	14
ANDERSON CO HS	271	267	296	80	40	55	3	14	7	12	4	17
APOLLO HS	281	288	307	142	125	107			21	2	9	53
ATHERTON HS	200	199	159	42	39	35						7
AUGUSTA HS	26	23	21	10	3	10	4	2	5			4
BALLARD CO CTC	101	93	93	92	87	84	27	26	29		25	32
BALLARD HS	278	292	315	37	73	58						6
BALLARD MEMORIAL HS	80	54	62	15	25	31	3	5	9		7	12
BARBOURVILLE HS	59	49	51	17	17	19	5	6	3	7	2	
BARDSTOWN HS	129	118	99	18	42	37	1	4	9			9
BARREN CO HS	320	317	334	82	137	142	20	68	56	20	17	84
BATH CO HS	146	151	153	93	105	103	7	29	27	3	6	9
BEECHWOOD HS	81	62	75	15	14	19	7					
BELFRY HS	166	161	127	23	38	36	2	15	7	5	3	27
BELL CO HS	150	173	185	40	26	55	12	8	14	4	5	21
BELLEVUE HS	50	48	46	20	16	11	4	2	6			1
BEREA COM HS	67	44	45	58	18	3	1	1	1	2		1
BETSY LAYNE HS	91	94	95	4	49	37	1	19	4		5	14
BOONE CO HS	306	299	267	70	79	147	4	4		1	1	14
BOURBON CO HS	197	214	204	66	99	70	1	15	2	5	10	23
BOWLING GREEN HS	242	225	247	57	38	60		3	7	2	1	32
BOYD CO HS	82	82	129	31	43	38	5	14	24			4
BOYD CO HS VOC	119	173		75	107		11	25				
BOYLE CO HS	224	222	216	139	138	141	10	56	16	25	27	30
BRACKEN CO HS	71	74	81	52	49	60	13	16	28	11	5	45

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BREATHITT CO HS	163	120	113	79	65	65	4	9	10	24	21	40
BRECKINRIDGE CO HS	197	212	203	74	63	58		3	21	13	26	41
BRYAN STATION HS	379	395	371	99	106	100		10	13		6	23
BUCKHORN HS	24	14	20	10	8	15	3	4	9			8
BULLITT CENTRAL HS	244	290	264	139	197	187	55	68	11	1	12	98
BULLITT EAST HS	242	242	320	102	163	127	40	48	13	1	22	17
BURGIN HS	43	39	40	13	13	16		1	8	1	1	5
BUTLER CO HS	118	124	135	40	56	49	9	15	15	13	18	17
BUTLER HS	351	382	360	94	91	75		18	12			
CALDWELL CO HS	152	136	111	85	90	75	19	35	42	10	23	17
CALLOWAY CO HS	233	229	216	70	97	99	39	39	44	4	18	37
CAMPBELL CO HS	353	372	213	75	132	151	4	6	3	33	5	73
CAMPBELLSVILLE HS	48	38	45	6	8	10				2	3	2
CARLISLE CO HS	49	67	49	37	48	32	11	14	12	5	3	15
CARROLL CO HS	83	119	97	13	28	4	1	7		7	6	1
CARTER CO VOC SCHOOL	88	93	95	85	87	80	18	22	16	1	24	47
CASEY CO HS	156	147	161	44	69	113	9	20	34	33	47	87
CAVERNA HS	51	53	41	5	3	13		2				4
CENTRAL HARDIN HS	430	432	482	97	116	166		17	12			18
CENTRAL HS	249	309	305	177	251	242	6	43	14			
CHAPMAN ACADEMIC VOC ED CTR	161	175	159	53	78	86	1		10	1	20	19
CHRISTIAN CO CTC	126	100		33	39		5	7		14	27	
CHRISTIAN CO HS	268	213	193	91	76	114	12	3	12	5	15	27
CLAY CO HS	152	172	173	72	85	79	11	9	13	6	19	45
CLINTON CO HS	82	87	91	29	35	22	8	13	3	20	18	12
CONNER HS	246	278	255	90	53	41		9	16	2	2	
COOPER HIGH SCHOOL	180	195	199	30	29	15	1			1		1
CORBIN HS	154	199	207	37	94	102	17	38	46	26	48	91

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CRITTENDEN CO HS	74	65	69	27	26	33	11	3	6	5	10	12
CUMBERLAND CO HS	68	80	78	42	58	42	6	14	12	28	29	13
DANVILLE HS	49	69	66	30	45	50	5	15	14	12	10	8
DAVIESS CO HS	390	380	391	174	138	136		29	26	1	1	43
DAWSON SPRINGS HS	51	63	42	31	21	16	1	7	5	3	1	11
DAYTON HS	52	47	26	47	41	14	1	2	3			2
DIXIE HEIGHTS HS	108	73	107	108	20	25	4	2	2	3		3
DOSS HS	228	256	228	33	88	90	3	9	16			13
DUNBAR HS	374	421	455	91	108	104	1				2	2
DUPONT MANUAL	337	389	327	162	199	132	6	1				4
EAST CARTER CO HS	139	161	208	41	34	98	12	12	33		3	14
EAST RIDGE HS	142	142	131	12	28	31	1	6	11		3	11
EASTERN HS	498	566	508	229	260	263	1					1
EASTSIDE TECHNICAL CENTER	300	318	281	300	318	281	34	13	6		42	77
EDMONSON CO HS	140	147	140	90	104	88	4	15	15		1	14
ELIZABETHTOWN HS	161	154	158	36	32	32	12	16	10			18
ELKHORN CROSSING SCHOOL		69	214		52	144		28				11
ELLIOTT CO HS	73	56	61	26	22	36	2	4	9			9
EMINENCE HS	27		39	10		34	6		20	1		8
ESTILL CO HS	170	165	175	49	76	90	6	23	35	23	45	67
FAIRDALE HS	208	264	237	69	82	59	12	6	5		6	26
Fairview High School			31			31			15			7
FERN CREEK HS	342	363	363	87	122	127	21	16	18		1	18
FLEMING CO HS	169	182	169	142	140	118	7	16	10	34	33	40
FOSTER MEADE VOC ED CTR	160	182		86	113		13	21		26	36	
FRANKFORT HS	44	42	26	8	3	14			9			7
FRANKLIN CO CTC	233	257	253	90	110	103	16	5	38			23
FRANKLIN CO HS	166	245	200	48	72	55	3	1	13			11

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FRANKLIN SIMPSON HS	229	206	214	136	139	185	26	26	18		41	83
FULTON CO HS	23	30	23	13	27	2		3		6	17	1
FULTON HS	28		24	4		1	2			1		1
GALLATIN CO HS	101	111	105	24	28	29	5	5	11		1	7
GARRARD CO HS	201	193	152	75	55	66	16	3	25	9	22	19
GEORGE ROGERS CLARK HS	331	337	306	141	177	125	13	33	19	26	29	42
GLASGOW HS	119	92	103	50	34	34	1	1	1	2	6	3
GRANT CO HS	269	269	266	157	165	184	31	32	58	35	36	41
GRAVES CO HS	257	263	299	78	102	82	30	43	20	10	11	74
GRAYSON CO AVEC	223	238	226	72	79	90	4	1	7			74
GRAYSON CO HS	268	294	275	65	69	71	2	1				62
GREEN CO HS	100	57	128	32	22	37	5	6	3	18	17	13
GREENUP CO HS	123	96	176	34	28	90	3	11	11	20	13	22
GREENWOOD HS	414	371	258	131	141	141	50	53	64	6	6	26
HANCOCK CO HS	118	108	97	56	35	66	5	4	3	23	15	35
HARLAN CO HS	94	154	166	29	54	70		23	15	19	17	31
HARLAN HS	47	50	50	7	6	3	2			1		
HARRISON CO HS	185	211	213	69	95	99		29	32	19	32	56
HART CO HS	191	180	191	79	94	113	22	24	28	3	3	11
HAZARD HS	73	71	79	47	54	38	8	23	7			
HEATH HS	130	146		58	91		20			2	5	
HENDERSON CO HS	408	515	481	250	376	306	22	45	20	44	107	246
HENRY CLAY HS	211	196	220	23	37	28	1		8			1
HENRY CO HS	130	147	120	96	109	76	33	35		23	36	50
HICKMAN CO HS	46	33	64	26	21	42	7	9	20	11	7	16
HIGHLANDS HS	63	65	80	45	35	21	1					
HOLMES JR SR HS	157	127		37	24		1				8	
HOPKINS CO CENTRAL HS	217	221	216	126	113	88	23	32	37	25	5	71

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HOPKINSVILLE HS	235	218	188	81	102	120	34	32	28	7	21	32
IROQUOIS HS	221	190	173	75	94	66	8	12	10			12
JACKSON CO HS	127	145	109	67	55	23	15	12	1	17	28	15
JEFFERSONTOWN HS	226	261	295	70	110	153	20	23	15			50
JESSAMINE CAREER AND TECH CENTER	455	448	524	185	209	261	36	51	60		5	17
JOHN HARDIN HS	268	270	270	69	106	78	14	13	8			5
JOHNSON CENTRAL HS	271	252	258	241	235	225	50	53	40	72	97	52
Kenton County Academies of Innovation and Techr	144			88			6			8		
KNOTT CENTRAL HS	104	78	123	30	12	23	5	4	2	3	1	7
KNOX CENTRAL HS	185	218	165	60	71	50	14	15	20	12	14	33
KY TECH - BARREN CO ATC	322	318	332	134	116	158	12	41	51	72	43	91
KY TECH - BELFRY ATC	165	135	128	117	110	90	6	14	7	43	68	55
KY TECH - BELL CO ATC	214	251	257	153	178	146	24	29	11	39	80	92
KY TECH - BOONE CO ATC	98	100	88	90	93	75	3	6	2	60	59	60
KY TECH - BREATHITT CO ATC	171	144	124	69	65	50	4	10	13	38	45	36
KY TECH - BRECKINRIDGE CO ATC	247	256	237	103	116	125	1	12	38	55	93	110
KY TECH - BULLITT CO ATC	122	105	77	67	63	52	5	10	2	19	30	28
KY TECH - BUTLER CO ATC	109	98	105	76	47	57	3	6	9	31	28	34
KY TECH - CALDWELL CO ATC	149	149	169	117	113	118	10	18	21	57	57	75
KY TECH - CAMPBELL CO ATC	119	117	127	117	117	126	12	8	2	59	69	57
KY TECH - CARROLL CO ATC	122	159	157	75	82	89	2	15	15	33	46	60
KY TECH - CASEY CO ATC	157	134	142	34	51	57	9	20	18	26	43	56
KY TECH - CLARK CO ATC	211	206	199	49	60	79	1	11	3	36	32	33
KY TECH - CLAY CO ATC	50	90	76	39	64	51	3	2		19	30	38
KY TECH - CLINTON CO ATC	103	108	134	52	57	78	14	13	9	37	37	56
KY TECH - CORBIN ATC	145	177	176	58	71	78	10	13	22	33	49	51
KY TECH - FLOYD CO ATC	218	206	231	120	129	161	6	10	19	40	57	85
KY TECH - FULTON CO ATC	70	76	102	47	55	83	6	13	13	32	39	61

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School 2011 2012	Total Enrolled 2011 2012	Total Enrolled 2012 2013	Total Enrolled 2013 2014	Prep Seniors 2011 2012	Prep Seniors 2012 2013	Prep Seniors 2013 2014	ASVAB 2011 2012	ASVAB 2012 2013	ASVAB 2013 2014	WorkKeys 2011 2012	WorkKeys 2012 2013	WorkKeys 2013 2014
KY TECH - GARRARD CO ATC	117	121	102	87	92	64	4	11	16	55	47	32
KY TECH - GREEN CO ATC	199	190	161	89	85	76	8	12	8	51	63	46
KY TECH - GREENUP CO ATC	158	110	134	68	47	67	11	11	17	38	37	33
KY TECH - HARRISON CO ATC	224	268	242	52	73	68		6	15	30	46	35
KY TECH - HUGHES JONES HARRODSBURG ATC	122	154	172	92	117	112		18	9	51	67	70
KY TECH - JACKSON CO ATC	106	131	109	23	33	37	3	4		8	24	26
KY TECH - KNOTT CO ATC	91	119	131	46	43	73	1	4	13	17	14	47
KY TECH - KNOX CO ATC	160	197	156	50	59	51	8	15	12	24	26	26
KY TECH - LAKE CUMBERLAND ATC	151	149	157	89	94	101	2	12	7	42	53	70
KY TECH - LEE CO ATC	119	133	116	85	90	84	6	8	4	56	63	72
KY TECH - LESLIE CO ATC	104	125	108	39	78	61	3	25	5	27	63	43
KY TECH - LETCHER CO ATC	171	198	179	72	83	91	1	14	1	36	56	80
KY TECH - LINCOLN CO ATC	125	121	133	53	44	64		8	17	42	35	53
KY TECH - MADISON CO ATC	388	359	356	65	83	109	3	4	4	42	56	47
KY TECH - MARION CO ATC	238	239	228	64	74	101	30	8	33	47	36	61
KY TECH - MARTIN CO ATC	120	116	121	65	59	65	14	9		44	41	48
KY TECH - MASON CO ATC	85	54	59	70	50	56	1	1	7	23	33	21
KY TECH - MAYFIELD GRAVES CO ATC	213	206	233	79	69	66	30	19	13	58	51	52
KY TECH - MEADE CO ATC	200	178	199	119	113	120	6	2	2	73	85	85
KY TECH - MILLARD ATC	122	122	122	98	93	89	10	13	8	41	64	64
KY TECH - MONROE CO ATC	143	159	196	108	93	128	29	21	39	44	49	75
KY TECH - MONTGOMERY CO ATC	234	216	248	78	62	83	11	7	4	42	35	55
KY TECH - MORGAN CO ATC	198	198	188	45	50	59	6	9	6	16	25	39
KY TECH - MURRAY CALLOWAY CO ATC	147	149	144	68	75	89	9	15	24	26	47	51
KY TECH - NELSON CO ATC	177	97	132	70	56	69	3	2	4	29	38	44
KY TECH - OHIO CO ATC	186	202	209	43	76	84	11	24	30	18	12	20
KY TECH - PADUCAH ATC	163	120	182	77	66	85	9	4	9	46	34	31
KY TECH - PULASKI CO ATC	165	167	199	113	97	112	4	19	5	73	78	90

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School 2011 2012	Total Enrolled 2011 2012	Total Enrolled 2012 2013	Total Enrolled 2013 2014	Prep Seniors 2011 2012	Prep Seniors 2012 2013	Prep Seniors 2013 2014	ASVAB 2011 2012	ASVAB 2012 2013	ASVAB 2013 2014	WorkKeys 2011 2012	WorkKeys 2012 2013	WorkKeys 2013 2014
KY TECH - ROCKCASTLE CO ATC	156	171	164	102	67	74	2	26	14	67	60	67
KY TECH - RUSSELL ATC	104	109	135	30	43	63	8	6	8	18	38	44
KY TECH - RUSSELLVILLE ATC	257	234	254	83	99	111	13	32	34	31	48	49
KY TECH - SHELBY CO ATC	363	401	354	112	97	85	10	4	2	73	54	23
KY TECH - WARREN CO ATC	109	136	156	83	113	130	12	21	28	44	69	91
KY TECH - WAYNE CO ATC	172	188	182	93	95	112	24	26	27	61	31	60
KY TECH - WEBSTER CO ATC	95	120	88	39	48	38		15	1	27	40	34
LAFAYETTE HS	385	367	408	121	99	122	2				7	15
LARUE CO HS	178	156	173	54	50	62	5	2				18
LAWRENCE CO HS	134	116	134	73	62	101		19	36	7	24	12
LEE CO HS	62	53	43	28	48	32			1	18	33	28
LETCHER CO CENTRAL HS	99	108	151	35	21	110	2	2	1	12	8	44
Lewis County High School			36			2						1
LINCOLN CO HS	275	267	243	73	78	106	5	13	23	10	21	34
LIVINGSTON CENTRAL HS	103	107	68	67	74	50	17	16	21		8	12
LLOYD HS		75	121		49	114		23	67		7	32
LOGAN CO HS	270	255	242	157	124	121	29	48	49	12	29	34
LYNN CAMP HS	72	72	74	40	39	19	7	10	3	1		14
LYON CO HS	73	66	56	40	32	23	9	7	7	4	2	9
MADISON CENTRAL HS	282	262	300	39	45	27	6	6	1	8	16	2
MADISON SOUTHERN HS	232	215	242	77	60	81	4	4	12	2	9	24
MADISONVILLE N HOPKINS	216	269	259	83	116	76	5	60	6	9	16	57
MAGOFFIN CO HS	130	154	127	111	124	99	10	31	15			30
MALE HS	340	269	254	91	97	47		29				
MARION CO HS	241	216	208	102	118	88	45	8	44	33	16	26
MARSHALL CO HS	257	306	274	88	115	83	39	54	41			22
MARSHALL CO TECH CTR	245	278	259	99	114	104	36	62	36	1		47
MARTHA LAYNE COLLINS HIGH SCHOOL	132	187	218	37	49	63	1	3	12	9	12	18

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School 2011 2012	Total Enrolled 2011 2012	Total Enrolled 2012 2013	Total Enrolled 2013 2014	Prep Seniors 2011 2012	Prep Seniors 2012 2013	Prep Seniors 2013 2014	ASVAB 2011 2012	ASVAB 2012 2013	ASVAB 2013 2014	WorkKeys 2011 2012	WorkKeys 2012 2013	WorkKeys 2013 2014
MASON CO HS	145	130	156	25	39	81	1	13	27	1	21	19
MAYFIELD HS	70	65	80	43	38	43	19	5	6	18	10	24
McCracken County High School			454			241			52			59
MCCREARY CENTRAL HS	171	193	195	87	122	116	9	20		47	69	75
MCLEAN CO HS	91	81	96	33	42	46	13	11	21			14
MEADE CO HS	367	374	402	150	142	154	18	3	2	21	24	41
MENIFEE CO HS	88	77	66	50	33	30	12	12	1	6	6	13
MERCER CO HS	180	211	136	52	44	68		16	22	2	4	25
METCALFE CO HS	102	92	98	55	30	37	31	12	16	4	4	5
MIDDLESBORO HS	98	104	84	34	33	22	6	11	9		1	2
MONROE CO HS	113	106	107	50	57	79	12	14	24	22	21	53
MONTGOMERY CO HS	219	211	275	112	104	153	23	3	15	32	14	44
MOORE HS	203	218	183	88	115	68		9	6		1	16
MORGAN CO HS	135	113	114	54	27	52	17	12	24	7	3	18
MUHLENBERG CO CTC	115	129	135	110	94	73	20	20	16	35	38	57
MUHLENBERG CO HS	328	316	321	111	141	200	31	53	62	6	16	153
MURRAY HS	110	97	99	53	60	41	23	4		2	1	3
NELSON CO HS	156	128	87	45	86	36		1	12	5	5	10
NEWPORT HS	86	89	85	51	55	63	12	23	7		6	37
NICHOLAS CO HS	81	78	62	47	56	36	5	13	6	5	21	2
NORTH BULLITT HS	257	269	264	98	129	153	3	28	32	6	9	4
NORTH HARDIN HS	303	328	343	64	121	126	5	34	16			34
NORTH LAUREL HS	235	318	275	66	124	110	13	43	45	23	41	37
OHIO CO HS	174	182	193	41	59	57	8	16	16	2	5	12
OLDHAM CO HS	248	207	270	47	43	44						16
OWEN CO HS	117	121	102	6	29	26		6	8			17
OWENSBORO HS	224	245	265	17	51	72	4	18	14			28
OWSLEY CO HS	71	74	56	48	69	42	11	2	1	8	21	18

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School 2011 2012	Total Enrolled 2011 2012	Total Enrolled 2012 2013	Total Enrolled 2013 2014	Prep Seniors 2011 2012	Prep Seniors 2012 2013	Prep Seniors 2013 2014	ASVAB 2011 2012	ASVAB 2012 2013	ASVAB 2013 2014	WorkKeys 2011 2012	WorkKeys 2012 2013	WorkKeys 2013 2014
PADUCAH-TILGHMAN HS	134	118	127	21	20	35	3			4	4	3
PAINTSVILLE HS	59	54	61	39	21	29	15	8	8			
PAUL G. BLAZER HS	192	192	204	106	99	94		8				65
PENDLETON CO HS	214	182	171	90	103	61	22	27	3	26	34	41
PERRY CO CENTRAL HS	209	209	188	90	114	131	5	21	4		13	51
PHELPS HS	50	60	56	17	43	32	1	8	8		8	7
PIKE CENTRAL HS	158	149	128	8	11	34	1	8	12	1	2	13
PIKEVILLE HS	97	74	69	30	36	13	7	16	7		3	2
PLEASURE RIDGE PARK HS	386	442	399	169	182	87	38	15				3
POWELL CO HS	174	162	171	122	133	146	38	36	38	1		20
PRESTONSBURG HS	110	47	58	5	12	23	1		1	1	2	4
PULASKI CO HS	239	267	241	78	138	147	2	47	7	58	46	41
RACELAND-WORTHINGTON HS	58	58	79	24	27	32		10	15	1	2	25
Robertson Co HS	31	23	26	20	12	13			5			
ROCKCASTLE CO HS	140	172	164	49	63	70	4	33	24	34	47	60
ROWAN CO HS	194	192	232	99	60	79	31			6	31	48
RUSSELL CO HS	177	205	201	100	158	149		59	12	56	119	104
RUSSELL HS	74	71	75	5	9	20			8	2	4	6
RUSSELLVILLE HS		36	46		16	28		1	2		2	16
RYLE HS	333	373	380	102	162	175			8	1	2	2
SCOTT CO HS	454	466	505	147	169	91	1	72				25
SCOTT HS	236	205	182	82	8	4	1		2	7	1	
SENECA HS	310	360	390	9	79	73		7	5			19
SHAWNEE HS	99	112	98	34	36	24	1	8	1			10
SHELBY CO HS	314	235	198	61	59	85	3	11	11	12	18	24
SHELBY VALLEY HS	148	107	119	23	45	49	5	16	1		14	31
SHELDON CLARK HS	63	74	71	17	27	25	1		3	7	13	20
SIMON KENTON HS	331	375	340	57	62	39	4	7	13	2	10	8

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School 2011 2012	Total Enrolled 2011 2012	Total Enrolled 2012 2013	Total Enrolled 2013 2014	Prep Seniors 2011 2012	Prep Seniors 2012 2013	Prep Seniors 2013 2014	ASVAB 2011 2012	ASVAB 2012 2013	ASVAB 2013 2014	WorkKeys 2011 2012	WorkKeys 2012 2013	WorkKeys 2013 2014
SOMERSET HS	102	106	118	23	48	84	6	20	4	18	30	26
SOUTH FLOYD HS		28	31		7	27		2	2			2
SOUTH LAUREL CO HS	244	293	263	58	84	79	21	25	17	23	35	19
SOUTH OLDHAM CO HS	245	246	217	38	68	108						20
SOUTH WARREN HIGH SCHOOL	159	188	246	70	64	109	20	23	34	4	2	27
SOUTHERN HS	277	316	304	81	135	161		12	5			44
SOUTHSIDE CTR FOR APPLIED TECH	280	316	314	231	281	241	11	11	7		48	60
SOUTHWESTERN PULASKI HS	214	247	312	71	98	150	6	13	12	51	32	38
SPENCER CO HS	175	219	167	67	84	63		28	31	6	1	14
TATES CREEK HS	371	334	367	93	88	91	8	29			4	12
TAYLOR CO HS	217	246	196	54	79	75	3	8	5	15	55	64
The Arvin Education Center	177	181	186	111	71	34	9					10
Thomas Nelson High School			78			31			14			5
TODD CO CENTRAL HS	118	153	126	83	97	63	25	44	23	1	3	34
TRIGG CO HS	143	149	155	119	127	140	38	43	48	12	13	60
TRIMBLE CO HS	76	76	73	16	22	22	3	12	6			17
UNION CO CTC	107	150	161	75	116	118	23	34	22	5	62	83
UNION CO HS	64	57	71	22	14	16	9	6	3	1	8	13
VALLEY HS	186	179	209	46	43	42		9	5			10
WAGGENER HS	188	200	149	116	62	19		9	1	2		1
WALTON VERONA HS	108	112	117	90	94	88	11	3		9	8	15
WARREN CENTRAL HS	267	221	198	122	102	75	29	29	23	8	10	21
WARREN EAST HS	249	189	200	81	47	46	22	17	21	3	4	14
WASHINGTON CO HS	142	139	135	84	72	55	29	30	16	8	3	30
WAYNE CO HS	110	114	145	54	87	83	19	30	33	35	28	36
WEBSTER CO HS	124	96	78	40	64	41	8	12	2	7		31
WEST CARTER HS	123	136	130	58	48	65	3	17	12		8	24
WESTERN HILLS HS	176	181	182	62	67	47	11		16			12

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School 2011 2012	Total Enrolled 2011 2012	Total Enrolled 2012 2013	Total Enrolled 2013 2014	Prep Seniors 2011 2012	Prep Seniors 2012 2013	Prep Seniors 2013 2014	ASVAB 2011 2012	ASVAB 2012 2013	ASVAB 2013 2014	WorkKeys 2011 2012	WorkKeys 2012 2013	WorkKeys 2013 2014
WESTERN HS	195	197	183	32	55	14					3	10
WHITLEY CO HS	250	256	236	62	84	84	10	29	32	19	21	27
WILLIAMSBURG IND HS	72	46	50	6	9	7		1	1			3
WILLIAMSTOWN SR HIGH	20	22	23	20	21	9				1		
WOLFE CO HS	63	79	96	46	48	41	16	21	2		12	16
WOODFORD CO HS	306	299	284	42	84	72	11	6	1		51	29

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School 2011 2012	KOSSA 2011 2012	KOSSA 2012 2013	KOSSA 2013 2014	IndCert 2011 2012	IndCert 2012 2013	IndCert 2013 2014	Career Ready 2011 2012	Career Ready 2012 2013	Career Ready 2013 2014	College Ready 2011 2012	College_Ready 2012 2013
ADAIR CO HS	23	12	44				21	7	39	32	23
ALLEN CO AVEC	27	20	26	23	23	27	2	12	38	36	46
Allen Central High School			5			11			12		
ALLEN CO HS	26	21	21		8	7	2	15	21	15	29
ANDERSON CO HS	35	20	32				8	10	16	26	19
APOLLO HS	59	53	53		5	7	1	9	51	55	65
ATHERTON HS	9		1		13	9			1	20	17
AUGUSTA HS	1	1	7				1	1	7	6	1
BALLARD CO CTC	33	39	43	24	43	40	15	39	52	45	43
BALLARD HS	3	6	34	12	21	14			5	21	41
BALLARD MEMORIAL HS	10	15	17			3	3	9	16	7	7
BARBOURVILLE HS	8	2	9				5	1	2	9	10
BARDSTOWN HS	4	9	26		4	12		2	14	8	14
BARREN CO HS	29	50	74	10	25	52	11	50	78	24	52
BATH CO HS	33	26	53	20	22	23	16	19	30	18	41
BEECHWOOD HS	1	4	2			2				15	13
BELFRY HS	9	10	8		5	6	2	11	10	10	24
BELL CO HS	12	5	27	2			9	4	23	9	7
BELLEVUE HS	2	7	4	2	7		2	1	4	8	11
BEREA COM HS	12	7	3				1		1	15	7
BETSY LAYNE HS	2	8	15			29	1	5	16	2	35
BOONE CO HS	14	14	68		7	10			8	23	43
BOURBON CO HS	24	33	24		9	6	3	13	9	27	44
BOWLING GREEN HS	13	8	24	9	5	21	1	1	26	27	21
BOYD CO HS	9	6	15		10	17	3	8	24	13	16
BOYD CO HS VOC	19	31		14	25		6	14		22	35
BOYLE CO HS	73	85	90	2	17		24	68	34	74	71
BRACKEN CO HS	16	9	11				7	4	8	20	31

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School 2011 2012	KOSSA 2011 2012	KOSSA 2012 2013	KOSSA 2013 2014	IndCert 2011 2012	IndCert 2012 2013	IndCert 2013 2014	Career Ready 2011 2012	Career Ready 2012 2013	Career Ready 2013 2014	College Ready 2011 2012	College_Ready 2012 2013
BREATHITT CO HS	4	13	25		6	3	2	12	23	31	19
BRECKINRIDGE CO HS	26	30	29		9	2	2	16	29	16	26
BRYAN STATION HS	20	26	44		17	17		4	24	46	39
BUCKHORN HS	2	3	5			7	2	3	11	6	3
BULLITT CENTRAL HS	40	62	74		13	46	22	43	46	68	68
BULLITT EAST HS	4	35	39	1	40		4	42	18	50	91
BURGIN HS	7	2	14				1		12	5	2
BUTLER CO HS	17	22	24	11	13	24	13	23	27	16	26
BUTLER HS	11	5	19	10	15	6		5	11	49	56
CALDWELL CO HS	28	35	44				16	27	31	33	49
CALLOWAY CO HS	39	51	58	17	19	31	31	35	62	50	57
CAMPBELL CO HS	33	60	64			4	18	8	55	33	78
CAMPBELLSVILLE HS	3	2	7				2	1	1		
CARLISLE CO HS	23	22	12	1	11		11	10	11	20	32
CARROLL CO HS		1						1		1	15
CARTER CO VOC SCHOOL	35	40	37	12	22	39	15	32	52	33	39
CASEY CO HS	15	14	46		12	14	15	24	55	14	35
CAVERNA HS	1	3	3					2	1	1	1
CENTRAL HARDIN HS	26	48	78	16	24	29		16	22	51	67
CENTRAL HS	13	21	64	1	15	69	1	14	11	47	75
CHAPMAN ACADEMIC VOC ED CTR	6	15	32		12	17	2	5	18	7	18
CHRISTIAN CO CTC	16	11		1	9		11	14		8	24
CHRISTIAN CO HS	20	11	20		40	63	14	17	29	35	51
CLAY CO HS	12	24	42	2	5	4	6	17	40	15	32
CLINTON CO HS	6	6	4	3	7	6	8	12	6	11	19
CONNER HS	7	5	15		8	20		2	15	54	27
COOPER HIGH SCHOOL	11	7	6	4	6	3	1		1	20	21
CORBIN HS	16	22	65		3	3	16	21	67	21	49

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School 2011 2012	KOSSA 2011 2012	KOSSA 2012 2013	KOSSA 2013 2014	IndCert 2011 2012	IndCert 2012 2013	IndCert 2013 2014	Career Ready 2011 2012	Career Ready 2012 2013	Career Ready 2013 2014	College Ready 2011 2012	College_Ready 2012 2013
CRITTENDEN CO HS	14	6	12				10	4	8	15	7
CUMBERLAND CO HS	27	27	24	4	4	4	22	20	19	13	19
DANVILLE HS	17	24	23				9	16	14	12	24
DAVIESS CO HS	50	43	67		5	5		23	49	74	65
DAWSON SPRINGS HS	2	3	4				1	2	4	13	10
DAYTON HS	7	5	2		7	3		2	3	15	19
DIXIE HEIGHTS HS					1					43	7
DOSS HS	2	10	22	6	8	20	3	5	21	5	18
DUNBAR HS	15	31	40		6	4		1		51	58
DUPONT MANUAL	104	146	121	1			4		2	142	184
EAST CARTER CO HS	11	21	48		3	10	7	11	32	20	27
EAST RIDGE HS	5	7	11		2	15	1	5	15	5	18
EASTERN HS	30	83	203	34	71	85			1	162	184
EASTSIDE TECHNICAL CENTER	85	85	90	5	2	24	22	31	50	107	111
EDMONSON CO HS	29	20	36			1	4	12	15	33	41
ELIZABETHTOWN HS	2	8	13				2	6	13	16	20
ELKHORN CROSSING SCHOOL		34	100		2	9		23	8		49
ELLIOTT CO HS	4	7	5		9	7	1	4	9	5	5
EMINENCE HS	2					31	2		28	6	
ESTILL CO HS	14	19	50			11	11	17	52	7	38
FAIRDALE HS	3	8	6	6	19	25	1	8	17	10	25
Fairview High School			17						15		
FERN CREEK HS	19	36	52		28	53	8	12	31	29	69
FLEMING CO HS	64	76	79	24	40	33	28	43	42	63	66
FOSTER MEADE VOC ED CTR	39	51		18	26		24	46		34	44
FRANKFORT HS			10			2			9	3	2
FRANKLIN CO CTC	56	81	81	15	39	30	14	4	56	41	55
FRANKLIN CO HS	31	33	36		15		3	1	22	20	34

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School 2011 2012	KOSSA 2011 2012	KOSSA 2012 2013	KOSSA 2013 2014	IndCert 2011 2012	IndCert 2012 2013	IndCert 2013 2014	Career Ready 2011 2012	Career Ready 2012 2013	Career Ready 2013 2014	College Ready 2011 2012	College_Ready 2012 2013
FRANKLIN SIMPSON HS	23	39	65	11	50	125	10	35	92	36	89
FULTON CO HS	5	1					4			2	15
FULTON HS										2	
GALLATIN CO HS	7	7	9			1	4	4	9	10	12
GARRARD CO HS	10	10	38		4	4	5	8	30	22	22
GEORGE ROGERS CLARK HS	36	35	49			18	14	14	40	57	70
GLASGOW HS	28	15	23				1	3	1	34	26
GRANT CO HS	43	71	80	65	81	94	45	57	84	60	82
GRAVES CO HS	45	53	52	15	14	19	28	37	57	52	54
GRAYSON CO AVEC	29	25	42	12	15	31	4	1	56	20	33
GRAYSON CO HS	11	18	43			1			43	19	32
GREEN CO HS	20	10	19			6	15	9	7	8	11
GREENUP CO HS	25	18	49		4	11	16	19	24	16	20
GREENWOOD HS	48	45	55		17	15	29	32	43	82	94
HANCOCK CO HS	36	25	48	2			16	12	24	32	27
HARLAN CO HS	15	22	16		19	31	12	27	33	12	22
HARLAN HS										2	3
HARRISON CO HS	33	38	52				9	26	50	34	40
HART CO HS	17	23	36	9	16	25	15	19	24	37	50
HAZARD HS	19	10	21		4	11	2	9	6	20	24
HEATH HS	5	9					2	1		30	54
HENDERSON CO HS	88	124	139	74	150	112	54	119	222	107	194
HENRY CLAY HS	11	5	6		3	16			9	12	21
HENRY CO HS	32	45	42		13	30	24	36	39	37	60
HICKMAN CO HS	14	4	22			15	8	3	23	13	13
HIGHLANDS HS	26	26	14		2	6				33	27
HOLMES JR SR HS										7	5
HOPKINS CO CENTRAL HS	75	32	15	21	30	47	44	28	53	48	73

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School 2011 2012	KOSSA 2011 2012	KOSSA 2012 2013	KOSSA 2013 2014	IndCert 2011 2012	IndCert 2012 2013	IndCert 2013 2014	Career Ready 2011 2012	Career Ready 2012 2013	Career Ready 2013 2014	College Ready 2011 2012	College_Ready 2012 2013
HOPKINSVILLE HS	28	33	49		13	25	18	30	48	55	53
IROQUOIS HS	9	20	21		6	11	5	8	13	15	32
JACKSON CO HS	17	11	7		3	1	13	11	7	29	22
JEFFERSONTOWN HS	24	37	56		39	51	16	20	38	31	60
JESSAMINE CAREER AND TECH CENTER	91	87	167	31	42	44	29	41	63	101	119
JOHN HARDIN HS	34	35	28		16	20	8	6	7	43	63
JOHNSON CENTRAL HS	79	61	100	83	73	51	97	89	65	72	101
Kenton County Academies of Innovation and Techr	14			33			3			12	
KNOTT CENTRAL HS	8	4	12				3	2	3	10	8
KNOX CENTRAL HS	17	19	27			7	7	10	29	21	42
KY TECH - BARREN CO ATC	36	45	60	66	86	99	49	73	90	45	44
KY TECH - BELFRY ATC	52	62	20	69	59	61	37	57	46	12	14
KY TECH - BELL CO ATC	35	34	49	39	55	74	36	56	79	43	46
KY TECH - BOONE CO ATC	28	35	33	29	36	30	38	49	41	14	31
KY TECH - BREATHITT CO ATC	11	14	10	31	41	34	20	31	29	20	13
KY TECH - BRECKINRIDGE CO ATC	47	72	76	33	48	54	37	81	94	33	55
KY TECH - BULLITT CO ATC	12	10	19	19	22	29	14	19	26	11	18
KY TECH - BUTLER CO ATC	16	9	8	26	12	37	21	16	26	7	10
KY TECH - CALDWELL CO ATC	30	29	35	16	33	63	34	40	64	23	31
KY TECH - CAMPBELL CO ATC	51	45	35	37	31	39	53	50	35	17	28
KY TECH - CARROLL CO ATC	14	16	23	42	60	69	28	40	57	11	18
KY TECH - CASEY CO ATC	5	21	15	12	16	40	14	28	46	15	30
KY TECH - CLARK CO ATC	19	20	31	13	17	34	25	27	29	15	19
KY TECH - CLAY CO ATC	7	19	10	7	14	24	6	21	28	2	4
KY TECH - CLINTON CO ATC	19	10	35	12	12	34	24	18	45	17	23
KY TECH - CORBIN ATC	23	17	36	7	11	30	20	20	45	16	29
KY TECH - FLOYD CO ATC	6	37	29	15	52	79	9	44	78	8	27
KY TECH - FULTON CO ATC	20	22	33	16	18	38	23	26	44	20	25

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School 2011 2012	KOSSA 2011 2012	KOSSA 2012 2013	KOSSA 2013 2014	IndCert 2011 2012	IndCert 2012 2013	IndCert 2013 2014	Career Ready 2011 2012	Career Ready 2012 2013	Career Ready 2013 2014	College Ready 2011 2012	College_Ready 2012 2013
KY TECH - GARRARD CO ATC	28	28	32	46	58	41	42	40	42	20	21
KY TECH - GREEN CO ATC	18	38	26	20	20	24	25	42	34	14	29
KY TECH - GREENUP CO ATC	18	18	27	11	18	22	24	25	30	17	24
KY TECH - HARRISON CO ATC	20	13	28	20	24	26	23	28	34	24	29
KY TECH - HUGHES JONES HARRODSBURG ATC	26	29	28	62	65	55	44	57	59	25	19
KY TECH - JACKSON CO ATC	11	7	15	3	7	18	6	14	22	1	4
KY TECH - KNOTT CO ATC	11	12	37	6	9	51	10	9	48	10	7
KY TECH - KNOX CO ATC	13	13	17	1	9	7	9	16	18	8	19
KY TECH - LAKE CUMBERLAND ATC	41	33	15	36	51	46	34	37	50	16	16
KY TECH - LEE CO ATC	30	36	37	21	36	57	36	49	67	25	37
KY TECH - LESLIE CO ATC	13	30	25	25	37	38	20	44	41	14	44
KY TECH - LETCHER CO ATC	33	42	59	30	55	54	29	53	71	13	35
KY TECH - LINCOLN CO ATC	12	22	44	28	12	23	32	24	48	23	16
KY TECH - MADISON CO ATC	28	35	67	4	8	18	22	35	43	18	24
KY TECH - MARION CO ATC	27	19	42	13	23	21	31	25	44	21	29
KY TECH - MARTIN CO ATC	41	29	43	17	20	24	34	30	41	20	28
KY TECH - MASON CO ATC	9	14	6	16	20	25	13	24	16	9	11
KY TECH - MAYFIELD GRAVES CO ATC	41	35	39	21	8	24	40	32	41	38	31
KY TECH - MEADE CO ATC	23	16	28	53	47	42	52	48	63	67	57
KY TECH - MILLARD ATC	36	34	43	16	31	43	31	52	56	16	55
KY TECH - MONROE CO ATC	16	17	22	29	47	73	27	37	62	37	44
KY TECH - MONTGOMERY CO ATC	22	9	18	9	22	11	20	24	26	27	25
KY TECH - MORGAN CO ATC	5	18	26	21	18	37	16	14	34	6	20
KY TECH - MURRAY CALLOWAY CO ATC	13	16	25	17	30	40	13	27	40	12	20
KY TECH - NELSON CO ATC	16	18	34	12	20	25	15	26	34	24	12
KY TECH - OHIO CO ATC	12	9	35	16	11	33	16	9	42	13	36
KY TECH - PADUCAH ATC	20	22	25		10	13	18	24	22	24	21
KY TECH - PULASKI CO ATC	26	45	65	49	62	77	53	69	85	41	45

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School 2011 2012	KOSSA 2011 2012	KOSSA 2012 2013	KOSSA 2013 2014	IndCert 2011 2012	IndCert 2012 2013	IndCert 2013 2014	Career Ready 2011 2012	Career Ready 2012 2013	Career Ready 2013 2014	College Ready 2011 2012	College_Ready 2012 2013
KY TECH - ROCKCASTLE CO ATC	34	43	39	7	23	19	33	49	49	33	26
KY TECH - RUSSELL ATC	12	13	32	1	7	4	9	16	31	11	22
KY TECH - RUSSELLVILLE ATC	23	29	50	3	12	18	20	29	49	29	45
KY TECH - SHELBY CO ATC	45	37	30	28	31	25	45	39	14	56	38
KY TECH - WARREN CO ATC	30	33	64	23	31	78	30	47	85	26	28
KY TECH - WAYNE CO ATC	12	14	47	34	32	34	36	21	51	27	49
KY TECH - WEBSTER CO ATC	13	22	15	19	14	17	20	26	25	14	17
LAFAYETTE HS	67	40	69	15	20	16	1	7	10	74	58
LARUE CO HS	31	21	24				4	2	4	26	28
LAWRENCE CO HS	18	27	37	12	18	27	4	34	35	18	22
LEE CO HS	3	14	20				3	13	20	11	20
LETCHER CO CENTRAL HS	3	7	8		4	10	2	6	8	9	12
Lewis County High School											
LINCOLN CO HS	20	31	53	10	29	49	3	20	44	22	46
LIVINGSTON CENTRAL HS	27	27	34				10	14	22	28	32
LLOYD HS					43	112		28	96		24
LOGAN CO HS	45	46	81	16	23	44	17	32	74	69	69
LYNN CAMP HS	15	15	4		7	7	7	6	7	12	7
LYON CO HS	13	7	12		3		5	3	10	19	17
MADISON CENTRAL HS	17	18	5				7	5		11	14
MADISON SOUTHERN HS	40	25	44			22	3	1	27	43	23
MADISONVILLE N HOPKINS	41	54	55	6	20	13	4	46	51	43	78
MAGOFFIN CO HS	76	64	55	27	16	33	10	24	37	22	44
MALE HS	12	22	17					15		63	77
MARION CO HS	42	28	45	11	20	14	31	8	42	44	47
MARSHALL CO HS	29	61	49		22	20	24	42	42	49	70
MARSHALL CO TECH CTR	30	47	60	32	42	50	29	44	70	45	67
MARTHA LAYNE COLLINS HIGH SCHOOL	13	21	37		5	33	5	9	26	14	35

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School 2011 2012	KOSSA 2011 2012	KOSSA 2012 2013	KOSSA 2013 2014	IndCert 2011 2012	IndCert 2012 2013	IndCert 2013 2014	Career Ready 2011 2012	Career Ready 2012 2013	Career Ready 2013 2014	College Ready 2011 2012	College_Ready 2012 2013
MASON CO HS	7	7	32		15	8		19	28	6	16
MAYFIELD HS	16	4	17			4	13	3	15	25	16
McCracken County High School			48						32		
MCCREARY CENTRAL HS	16	40	36		19	37	12	42	47	18	34
MCLEAN CO HS	17	11	24		5	5	9	5	23	14	18
MEADE CO HS	64	60	64			15	17	10	17	83	74
MENIFEE CO HS	21	10	6				10	8	2	21	13
MERCER CO HS	24	18	39				1	13	31	18	15
METCALFE CO HS	38	18	30				27	11	18	29	19
MIDDLESBORO HS	9	9	7			7	2	3	5	14	20
MONROE CO HS	22	13	36	5	3	24	21	12	38	17	31
MONTGOMERY CO HS	57	46	75				27	10	31	52	55
MOORE HS	13	14	6			17		4	11	28	49
MORGAN CO HS	17	11	16				7	7	14	23	12
MUHLENBERG CO CTC	64	32	26	64	46	37	42	41	47	16	18
MUHLENBERG CO HS	48	54	97		19	36	18	39	107	35	49
MURRAY HS	33	20	33				17	2	1	44	55
NELSON CO HS	17	12	13			5	2		15	14	16
NEWPORT HS	28	29	41			4	10	21	31	17	28
NICHOLAS CO HS	8	19	11				3	11	6	10	22
NORTH BULLITT HS		15	40		62	27		26	24	36	54
NORTH HARDIN HS	22	35	64	8	44	58	5	26	43	26	51
NORTH LAUREL HS	24	27	55		10	13	20	30	60	18	48
OHIO CO HS	10	20	22	7	31	32	7	17	24	12	26
OLDHAM CO HS	14	12	30						13	29	23
OWEN CO HS	4	11	15					5	15	4	16
OWENSBORO HS	2	10	18	5	6	28	2	8	37	7	29
OWSLEY CO HS	10	20	10		14	7	8	16	7	10	13

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School 2011 2012	KOSSA 2011 2012	KOSSA 2012 2013	KOSSA 2013 2014	IndCert 2011 2012	IndCert 2012 2013	IndCert 2013 2014	Career Ready 2011 2012	Career Ready 2012 2013	Career Ready 2013 2014	College Ready 2011 2012	College_Ready 2012 2013
PADUCAH-TILGHMAN HS	1	1	3	14	15	26	5	4	3	11	16
PAINTSVILLE HS	26	13	20				14	7	7	27	11
PAUL G. BLAZER HS	25	18	24		16	21		5	35	54	50
PENDLETON CO HS	25	32	17		3	17	19	25	24	39	51
PERRY CO CENTRAL HS	10	29	39	19	64	41	2	32	34	24	46
PHELPS HS		2	5			8		2	9	2	13
PIKE CENTRAL HS	5	8	21			6	2	7	20	2	6
PIKEVILLE HS	15	15	4			1	2	7	4	18	31
PLEASURE RIDGE PARK HS	11	13	22		8	5		8	3	52	63
POWELL CO HS	36	55	66				20	28	40	51	56
PRESTONSBURG HS		2								2	6
PULASKI CO HS	37	66	81	8	26	36	36	59	32	34	89
RACELAND-WORTHINGTON HS	4	6	18				1	4	18	9	11
Robertson Co HS	9	6	7						5	7	1
ROCKCASTLE CO HS	35	38	39		12	14	30	38	48	20	32
ROWAN CO HS	20	13	30			14	9	12	32	44	31
RUSSELL CO HS	47	74	49	15	15	31	39	77	67	33	85
RUSSELL HS	2	3	4			6	1	2	10	2	3
RUSSELLVILLE HS		3	8					1	6	6	
RYLE HS	24	49	91	15	49	38		2	7	68	115
SCOTT CO HS	70	90	40	3	9	18		55	18	93	126
SCOTT HS	26			16		4	7		2	47	2
SENECA HS		4	10	3	25	28		7	17	4	40
SHAWNEE HS	1		8	3	4	10		2	7	9	6
SHELBY CO HS	20	12	48		20	29	9	15	32	20	29
SHELBY VALLEY HS	7	10	29		9	9	2	11	26	7	28
SHELDON CLARK HS	9	8	6		13	15	4	11	14	7	11
SIMON KENTON HS	4	14	11		9	9	1	10	11	18	22

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School 2011 2012	KOSSA 2011 2012	KOSSA 2012 2013	KOSSA 2013 2014	IndCert 2011 2012	IndCert 2012 2013	IndCert 2013 2014	Career Ready 2011 2012	Career Ready 2012 2013	Career Ready 2013 2014	College Ready 2011 2012	College_Ready 2012 2013
SOMERSET HS	16	30	62				14	25	22	14	34
SOUTH FLOYD HS						23			2		3
SOUTH LAUREL CO HS	6	4	18		11	10	6	10	17	25	28
SOUTH OLDHAM CO HS	24	57	80						15	25	61
SOUTH WARREN HIGH SCHOOL	23	24	40	9	17	24	14	16	37	39	41
SOUTHERN HS	9	28	55	6	45	64		10	35	18	47
SOUTHSIDE CTR FOR APPLIED TECH	32	45	44	47	65	64	8	37	42	59	108
SOUTHWESTERN PULASKI HS	31	41	62		24	28	30	29	34	38	66
SPENCER CO HS	32	30	42			4	5	18	38	32	23
TATES CREEK HS	41	31	51	14	2		7	22	6	54	56
TAYLOR CO HS	37	48	47		6	24	10	43	55	35	52
The Arvin Education Center	15	21	20	24	14	5			9	60	36
Thomas Nelson High School			16			1	1		15	15	
TODD CO CENTRAL HS	27	32	22	4	22	9	16	23	21	29	58
TRIGG CO HS	62	62	73	14	13	28	42	45	67	52	68
TRIMBLE CO HS	3	12	14				1	8	13	3	12
UNION CO CTC	33	51	49	6	23	31	19	44	61	23	41
UNION CO HS	1	4	2				1	3	2	9	8
VALLEY HS	1	3	8	5	9	12		8	4	6	15
WAGGENER HS	11	15	8	21	24	12		7	1	34	30
WALTON VERONA HS	27	21	44	12	13	20	8		9	70	76
WARREN CENTRAL HS	37	20	30	16	22	36	17	14	32	47	32
WARREN EAST HS	9	9	13			6	5	6	15	32	17
WASHINGTON CO HS	42	41	24		5	18	23	28	28	40	53
WAYNE CO HS	28	39	37	19	33	33	23	40	49	20	53
WEBSTER CO HS	15	19	20				9	13	18	11	16
WEST CARTER HS	28	32	24		6	17		24	23	22	32
WESTERN HILLS HS	27	28	31		3		8		19	20	37

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School 2011 2012	KOSSA 2011 2012	KOSSA 2012 2013	KOSSA 2013 2014	IndCert 2011 2012	IndCert 2012 2013	IndCert 2013 2014	Career Ready 2011 2012	Career Ready 2012 2013	Career Ready 2013 2014	College Ready 2011 2012	College_Ready 2012 2013
WESTERN HS				11	5	5		3	5	8	22
WHITLEY CO HS	28	42	49		24	15	19	41	49	28	64
WILLIAMSBURG IND HS	4	7	5					1	3	5	8
WILLIAMSTOWN SR HIGH			6							12	15
WOLFE CO HS	36	37	25				14	23	9	18	20
WOODFORD CO HS	18	45	52		11	16	7	33	25	20	48

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School 2011 2012	College ready 2013 2014	Bonus 2011 2012	Bonus 2012 2013	%CCR 2011 2012	%CCR 2012 2013	%CCR 2013 2014
ADAIR CO HS	43	18	9	62.1%	45.3%	72.20%
ALLEN CO AVEC	50	21	18	41.8%	56.8%	69 %
Allen Central High School	11					75 %
ALLEN CO HS	25	8	18	23.3%	49.3%	56.1 %
ANDERSON CO HS	21	19	16	37.5%	52.5%	50.9 %
APOLLO HS	62	36	42	38.7%	59.2%	68.2 %
ATHERTON HS	21	6	9	47.6%	43.6%	62.9 %
AUGUSTA HS	6	1	1	60.0%	33.3%	80 %
BALLARD CO CTC	42	18	34	51.1%	74.7%	82.1 %
BALLARD HS	46	7	21	56.8%	56.2%	87.9 %
BALLARD MEMORIAL HS	12	5	7	53.3%	48.0%	61.3 %
BARBOURVILLE HS	15	7	2	52.9%	58.8%	78.9 %
BARDSTOWN HS	23	1	7	44.4%	35.7%	75.7 %
BARREN CO HS	55	19	30	35.4%	54.0%	62 %
BATH CO HS	45	14	26	23.7%	41.0%	48.5 %
BEECHWOOD HS	19	1	4	100.0%	92.9%	100 %
BELFRY HS	15	6	13	43.5%	65.8%	55.6 %
BELL CO HS	27	7	3	30.0%	30.8%	60 %
BELLEVUE HS	8	2	7	40.0%	68.8%	72.7 %
BEREA COM HS	3	6	4	25.9%	38.9%	100 %
BETSY LAYNE HS	28	1	7	50.0%	71.4%	89.2 %
BOONE CO HS	108	4	18	32.9%	54.4%	76.2 %
BOURBON CO HS	36	15	28	42.4%	46.5%	57.1 %
BOWLING GREEN HS	41	12	8	47.4%	55.3%	71.7 %
BOYD CO HS	21	7	10	41.9%	39.5%	71.1 %
BOYD CO HS VOC		14	22	30.7%	34.6%	
BOYLE CO HS	89	47	61	67.6%	67.4%	75.9 %
BRACKEN CO HS	40	9	7	40.4%	65.3%	71.7 %

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School 2011 2012	College ready 2013 2014	Bonus 2011 2012	Bonus 2012 2013	%CCR 2011 2012	%CCR 2012 2013	%CCR 2013 2014
BREATHITT CO HS	35	3	9	39.2%	36.9%	60 %
BRECKINRIDGE CO HS	25	13	23	24.3%	55.6%	60.3 %
BRYAN STATION HS	60	15	14	46.5%	38.7%	68 %
BUCKHORN HS	9	2	3	60.0%	37.5%	93.3 %
BULLITT CENTRAL HS	80	25	36	51.8%	42.1%	54 %
BULLITT EAST HS	86	2	49	51.0%	63.8%	74.8 %
BURGIN HS	10	3		46.2%	15.4%	81.3 %
BUTLER CO HS	27	10	18	52.5%	60.7%	69.4 %
BUTLER HS	45	13	15	52.1%	61.5%	60 %
CALDWELL CO HS	43	14	26	45.9%	62.2%	68 %
CALLOWAY CO HS	54	38	46	75.7%	63.9%	80.8 %
CAMPBELL CO HS	95	23	51	53.3%	60.6%	65.6 %
CAMPBELLSVILLE HS	6			33.3%	12.5%	70 %
CARLISLE CO HS	14	13	20	62.2%	68.8%	56.3 %
CARROLL CO HS	1		1	7.7%	53.6%	25 %
CARTER CO VOC SCHOOL	39	28	30	40.0%	63.2%	82.5 %
CASEY CO HS	57	11	19	40.9%	58.0%	61.9 %
CAVERNA HS	12	1	1	20.0%	66.7%	92.3 %
CENTRAL HARDIN HS	113	29	47	52.6%	64.7%	71.1 %
CENTRAL HS	95	8	21	26.6%	30.7%	40.1 %
CHAPMAN ACADEMIC VOC ED CTR	29	3	10	15.1%	26.9%	43 %
CHRISTIAN CO CTC		7	12	45.5%	69.2%	
CHRISTIAN CO HS	89	15	38	42.9%	71.1%	85.1 %
CLAY CO HS	27	6	17	22.2%	41.2%	55.7 %
CLINTON CO HS	17	4	12	51.7%	57.1%	77.3 %
CONNER HS	28	7	10	60.0%	50.9%	78 %
COOPER HIGH SCHOOL	8	10	9	66.7%	72.4%	60 %
CORBIN HS	76	13	19	64.9%	54.3%	84.3 %

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School 2011 2012	College ready 2013 2014	Bonus 2011 2012	Bonus 2012 2013	%CCR 2011 2012	%CCR 2012 2013	%CCR 2013 2014
CRITTENDEN CO HS	15	12	3	59.3%	34.6%	57.6 %
CUMBERLAND CO HS	25	13	16	52.4%	43.1%	69 %
DANVILLE HS	32	10	16	46.7%	64.4%	70 %
DAVIESS CO HS	76	28	30	42.5%	50.0%	74.3 %
DAWSON SPRINGS HS	8	1	3	45.2%	47.6%	50 %
DAYTON HS	9	5	7	31.9%	46.3%	64.3 %
DIXIE HEIGHTS HS	12		1	39.8%	35.0%	48 %
DOSS HS	44	5	11	15.2%	20.5%	52.2 %
DUNBAR HS	62	8	27	56.0%	54.6%	59.6 %
DUPONT MANUAL	126	99	142	88.9%	92.5%	96.2 %
EAST CARTER CO HS	73	8	23	51.2%	82.4%	76.5 %
EAST RIDGE HS	22	3	9	41.7%	64.3%	77.4 %
EASTERN HS	201	45	110	70.7%	70.8%	76.8 %
EASTSIDE TECHNICAL CENTER	110	53	43	37.7%	42.5%	52.7 %
EDMONSON CO HS	55	15	8	36.7%	44.2%	64.8 %
ELIZABETHTOWN HS	18	2	6	44.4%	68.8%	56.3 %
ELKHORN CROSSING SCHOOL	117		33		94.2%	86.1 %
ELLIOTT CO HS	12	3	3	19.2%	31.8%	41.7 %
EMINENCE HS	20	2		60.0%		82.4 %
ESTILL CO HS	66	5	17	28.6%	52.6%	84.4 %
FAIRDALE HS	17	2	10	14.5%	35.4%	49.2 %
Fairview High School	24					80.6 %
FERN CREEK HS	90	11	41	34.5%	57.4%	78.7 %
FLEMING CO HS	67	53	55	58.5%	71.4%	81.4 %
FOSTER MEADE VOC ED CTR		28	30	52.3%	66.4%	
FRANKFORT HS	13			37.5%	66.7%	92.9 %
FRANKLIN CO CTC	61	31	47	51.1%	50.9%	83.5 %
FRANKLIN CO HS	20	17	26	47.9%	47.2%	56.4 %

Appendix F

School 2011 2012	College ready 2013 2014	Bonus 2011 2012	Bonus 2012 2013	%CCR 2011 2012	%CCR 2012 2013	%CCR 2013 2014
FRANKLIN SIMPSON HS	125	15	65	28.7%	72.7%	96.2 %
FULTON CO HS		2	1	30.8%	55.6%	0 %
FULTON HS	1			50.0%		100 %
GALLATIN CO HS	13	5	7	41.7%	42.9%	55.2 %
GARRARD CO HS	31	7	8	29.3%	43.6%	59.1 %
GEORGE ROGERS CLARK HS	53	19	26	43.3%	40.7%	59.2 %
GLASGOW HS	28	26	14	68.0%	76.5%	82.4 %
GRANT CO HS	110	41	63	58.0%	70.9%	74.5 %
GRAVES CO HS	43	38	42	66.7%	54.9%	76.8 %
GRAYSON CO AVEC	57	18	19	30.6%	41.8%	73.3 %
GRAYSON CO HS	46	5	14	29.2%	46.4%	78.9 %
GREEN CO HS	23	7	9	50.0%	54.5%	70.3 %
GREENUP CO HS	58	15	18	64.7%	85.7%	68.9 %
GREENWOOD HS	92	39	50	62.6%	66.7%	68.8 %
HANCOCK CO HS	43	25	21	75.0%	88.6%	77.3 %
HARLAN CO HS	24	7	18	62.1%	59.3%	55.7 %
HARLAN HS	1			28.6%	50.0%	33.3 %
HARRISON CO HS	38	22	21	53.6%	51.6%	57.6 %
HART CO HS	63	20	28	46.8%	55.3%	61.9 %
HAZARD HS	30	13	9	42.6%	46.3%	78.9 %
HEATH HS		3	8	51.7%	60.4%	
HENDERSON CO HS	189	84	157	59.2%	74.7%	80.4 %
HENRY CLAY HS	18	6	7	52.2%	56.8%	67.9 %
HENRY CO HS	45	20	38	47.9%	60.6%	82.9 %
HICKMAN CO HS	27	8	3	57.7%	66.7%	73.8 %
HIGHLANDS HS	18	23	22	73.3%	77.1%	85.7 %
HOLMES JR SR HS				18.9%	20.8%	
HOPKINS CO CENTRAL HS	71	40	46	42.9%	68.1%	88.6 %

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School 2011 2012	College ready 2013 2014	Bonus 2011 2012	Bonus 2012 2013	%CCR 2011 2012	%CCR 2012 2013	%CCR 2013 2014
HOPKINSVILLE HS	59	24	28	70.4%	60.8%	65.8 %
IROQUOIS HS	38	4	16	22.7%	34.0%	62.1 %
JACKSON CO HS	8	12	12	44.8%	43.6%	43.5 %
JEFFERSONTOWN HS	84	19	42	47.1%	56.4%	66.7 %
JESSAMINE CAREER AND TECH CENTER	184	69	78	55.7%	61.7%	75.1 %
JOHN HARDIN HS	54	26	35	63.8%	59.4%	69.2 %
JOHNSON CENTRAL HS	120	62	76	52.3%	60.0%	67.1 %
Kenton County Academies of Innovation and Techn		6		15.9%		
KNOTT CENTRAL HS	15	6	3	33.3%	66.7%	69.6 %
KNOX CENTRAL HS	30	10	13	38.3%	63.4%	64 %
KY TECH - BARREN CO ATC	69	32	40	47.0%	69.8%	70.3 %
KY TECH - BELFRY ATC	16	10	13	35.0%	52.7%	53.3 %
KY TECH - BELL CO ATC	51	20	28	40.5%	43.3%	61.6 %
KY TECH - BOONE CO ATC	26	11	23	48.9%	62.4%	57.3 %
KY TECH - BREATHITT CO ATC	26	9	7	47.8%	56.9%	72 %
KY TECH - BRECKINRIDGE CO ATC	51	22	51	55.3%	75.0%	78.4 %
KY TECH - BULLITT CO ATC	8	7	12	29.9%	42.9%	57.7 %
KY TECH - BUTLER CO ATC	18	4	8	32.9%	40.4%	57.9 %
KY TECH - CALDWELL CO ATC	30	15	21	36.8%	46.9%	61 %
KY TECH - CAMPBELL CO ATC	25	14	20	50.4%	50.4%	38.9 %
KY TECH - CARROLL CO ATC	30	8	16	41.3%	52.4%	74.2 %
KY TECH - CASEY CO ATC	33	6	23	67.6%	68.6%	89.5 %
KY TECH - CLARK CO ATC	40	10	14	61.2%	56.7%	78.5 %
KY TECH - CLAY CO ATC	1		4	20.5%	32.8%	54.9 %
KY TECH - CLINTON CO ATC	49	15	14	50.0%	49.1%	73.1 %
KY TECH - CORBIN ATC	40	7	13	51.7%	52.1%	69.2 %
KY TECH - FLOYD CO ATC	85	3	22	11.7%	39.5%	70.2 %
KY TECH - FULTON CO ATC	38	15	17	59.6%	65.5%	61.4 %

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School 2011 2012	College ready 2013 2014	Bonus 2011 2012	Bonus 2012 2013	%CCR 2011 2012	%CCR 2012 2013	%CCR 2013 2014
KY TECH - GARRARD CO ATC	29	18	20	54.0%	48.9%	78.1 %
KY TECH - GREEN CO ATC	28	7	20	38.2%	61.2%	57.9 %
KY TECH - GREENUP CO ATC	37	12	15	44.1%	74.5%	65.7 %
KY TECH - HARRISON CO ATC	29	19	15	59.6%	58.9%	72.1 %
KY TECH - HUGHES JONES HARRODSBURG ATC	34	20	11	57.6%	56.4%	59.8 %
KY TECH - JACKSON CO ATC	13	1	3	30.4%	45.5%	67.6 %
KY TECH - KNOTT CO ATC	33	7	6	32.6%	30.2%	76.7 %
KY TECH - KNOX CO ATC	20	2	9	30.0%	45.8%	54.9 %
KY TECH - LAKE CUMBERLAND ATC	38	15	10	41.6%	45.7%	61.4 %
KY TECH - LEE CO ATC	37	21	31	49.4%	61.1%	86.9 %
KY TECH - LESLIE CO ATC	37	12	29	61.5%	82.1%	83.6 %
KY TECH - LETCHER CO ATC	49	9	31	47.2%	73.5%	82.4 %
KY TECH - LINCOLN CO ATC	40	22	12	67.9%	63.6%	78.1 %
KY TECH - MADISON CO ATC	50	11	19	47.7%	48.2%	61.5 %
KY TECH - MARION CO ATC	51	14	19	59.4%	50.0%	61.4 %
KY TECH - MARTIN CO ATC	31	16	22	63.1%	62.7%	67.7 %
KY TECH - MASON CO ATC	12	7	8	21.4%	54.0%	39.3 %
KY TECH - MAYFIELD GRAVES CO ATC	38	25	20	72.2%	65.2%	71.2 %
KY TECH - MEADE CO ATC	67	45	35	64.7%	62.8%	65.8 %
KY TECH - MILLARD ATC	46	8	40	40.8%	73.1%	76.4 %
KY TECH - MONROE CO ATC	69	16	25	46.3%	66.7%	66.4 %
KY TECH - MONTGOMERY CO ATC	35	9	18	50.0%	51.6%	55.4 %
KY TECH - MORGAN CO ATC	29	3	15	42.2%	54.0%	72.9 %
KY TECH - MURRAY CALLOWAY CO ATC	27	4	13	32.4%	49.3%	59.6 %
KY TECH - NELSON CO ATC	29	12	9	40.0%	51.8%	59.4 %
KY TECH - OHIO CO ATC	38	8	13	58.1%	51.3%	70.2 %
KY TECH - PADUCAH ATC	20	10	16	44.2%	47.0%	37.6 %
KY TECH - PULASKI CO ATC	80	32	41	56.6%	76.3%	83.9 %

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School 2011 2012	College ready 2013 2014	Bonus 2011 2012	Bonus 2012 2013	%CCR 2011 2012	%CCR 2012 2013	%CCR 2013 2014
KY TECH - ROCKCASTLE CO ATC	27	16	22	49.0%	79.1%	73 %
KY TECH - RUSSELL ATC	32	8	8	46.7%	69.8%	68.3 %
KY TECH - RUSSELLVILLE ATC	55	17	21	39.8%	53.5%	64 %
KY TECH - SHELBY CO ATC	42	34	16	67.0%	70.1%	60 %
KY TECH - WARREN CO ATC	55	16	25	48.2%	45.1%	70 %
KY TECH - WAYNE CO ATC	56	13	19	54.8%	61.1%	59.8 %
KY TECH - WEBSTER CO ATC	14	12	12	61.5%	64.6%	76.3 %
LAFAYETTE HS	74	54	36	62.0%	61.6%	68 %
LARUE CO HS	40	20	17	48.1%	56.0%	66.1 %
LAWRENCE CO HS	53	16	21	28.8%	67.7%	60.4 %
LEE CO HS	22	2	11	42.9%	47.9%	75 %
LETCHER CO CENTRAL HS	65		8	31.4%	71.4%	62.7 %
Lewis County High School	1					50 %
LINCOLN CO HS	73	6	31	31.5%	69.2%	82.1 %
LIVINGSTON CENTRAL HS	32	15	19	43.3%	50.0%	76 %
LLOYD HS	66		24		69.4%	89.5 %
LOGAN CO HS	90	34	36	44.6%	58.9%	90.1 %
LYNN CAMP HS	7	7	3	37.5%	28.2%	52.6 %
LYON CO HS	11	8	9	50.0%	53.1%	60.9 %
MADISON CENTRAL HS	9	7	7	33.3%	35.6%	33.3 %
MADISON SOUTHERN HS	59	34	14	55.8%	40.0%	82.7 %
MADISONVILLE N HOPKINS	61	24	49	53.0%	71.6%	90.8 %
MAGOFFIN CO HS	35	21	34	21.6%	38.7%	54.5 %
MALE HS	42	11	17	69.2%	79.4%	89.4 %
MARION CO HS	52	29	26	51.0%	41.5%	69.3 %
MARSHALL CO HS	58	25	53	56.8%	62.6%	78.3 %
MARSHALL CO TECH CTR	54	29	49	50.5%	64.9%	78.8 %
MARTHA LAYNE COLLINS HIGH SCHOOL	38	7	23	51.4%	75.5%	84.1 %

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School 2011 2012	College ready 2013 2014	Bonus 2011 2012	Bonus 2012 2013	%CCR 2011 2012	%CCR 2012 2013	%CCR 2013 2014
MASON CO HS	38	3	10	24.0%	64.1%	56.8 %
MAYFIELD HS	27	13	3	62.8%	44.7%	65.1 %
McCracken County High School	127					55.2 %
MCCREARY CENTRAL HS	18	7	21	26.4%	48.4%	48.3 %
MCLEAN CO HS	32	10	9	42.4%	42.9%	78.3 %
MEADE CO HS	98	48	37	59.3%	54.9%	66.2 %
MENIFEE CO HS	9	13	7	42.0%	42.4%	33.3 %
MERCER CO HS	25	13	9	34.6%	45.5%	60.3 %
METCALFE CO HS	26	23	13	63.6%	70.0%	78.4 %
MIDDLESBORO HS	17	6	7	41.2%	60.6%	77.3 %
MONROE CO HS	38	14	15	50.0%	56.1%	60.8 %
MONTGOMERY CO HS	88	36	38	57.1%	55.8%	61.4 %
MOORE HS	22	10	12	31.8%	42.6%	39.7 %
MORGAN CO HS	40	10	6	46.3%	51.9%	80.8 %
MUHLENBERG CO CTC	16	15	16	42.7%	51.1%	65.8 %
MUHLENBERG CO HS	71	20	34	35.1%	41.8%	58.5 %
MURRAY HS	38	29	19	83.0%	91.7%	95.1 %
NELSON CO HS	16	10	4	35.6%	18.6%	55.6 %
NEWPORT HS	26	11	18	37.3%	63.6%	68.3 %
NICHOLAS CO HS	6	3	12	23.4%	50.0%	27.8 %
NORTH BULLITT HS	59		29	36.7%	54.3%	44.4 %
NORTH HARDIN HS	69	17	38	42.2%	45.5%	69 %
NORTH LAUREL HS	58	14	23	40.9%	46.0%	64.5 %
OHIO CO HS	24	10	22	29.3%	50.8%	59.6 %
OLDHAM CO HS	28	8	10	61.7%	53.5%	63.6 %
OWEN CO HS	11	3	10	66.7%	55.2%	61.5 %
OWENSBORO HS	34	2	14	41.2%	56.9%	61.1 %
OWSLEY CO HS	17	3	10	31.3%	40.6%	52.4 %

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School 2011 2012	College ready 2013 2014	Bonus 2011 2012	Bonus 2012 2013	%CCR 2011 2012	%CCR 2012 2013	%CCR 2013 2014
PADUCAH-TILGHMAN HS	24	10	15	66.7%	80.0%	74.3 %
PAINTSVILLE HS	18	24	8	71.8%	57.1%	65.5 %
PAUL G. BLAZER HS	51	20	16	50.9%	53.5%	62.8 %
PENDLETON CO HS	30	19	25	47.8%	56.3%	60.7 %
PERRY CO CENTRAL HS	61	13	40	26.7%	57.9%	64.1 %
PHELPS HS	7		2	11.8%	30.2%	31.3 %
PIKE CENTRAL HS	17	2	5	25.0%	72.7%	67.6 %
PIKEVILLE HS	9	9	15	60.0%	86.1%	69.2 %
PLEASURE RIDGE PARK HS	36	9	17	30.8%	35.2%	44.8 %
POWELL CO HS	56	26	35	44.3%	44.4%	43.8 %
PRESTONSBURG HS	19		2	40.0%	50.0%	82.6 %
PULASKI CO HS	116	26	65	59.0%	71.0%	83.7 %
RACELAND-WORTHINGTON HS	15	2	4	41.7%	44.4%	65.6 %
Robertson Co HS	5	7	1	35.0%	8.3%	38.5 %
ROCKCASTLE CO HS	29	17	29	67.3%	65.1%	72.9 %
ROWAN CO HS	40	11	11	47.5%	55.0%	69.6 %
RUSSELL CO HS	89	25	63	49.0%	63.9%	63.8 %
RUSSELL HS	10	2	1	40.0%	44.4%	60 %
RUSSELLVILLE HS	9				6.3%	35.7 %
RYLE HS	145	29	71	66.7%	71.0%	83.4 %
SCOTT CO HS	49	53	82	63.3%	75.7%	67 %
SCOTT HS	3	23		57.3%	25.0%	75 %
SENECA HS	42	2	20	44.4%	51.9%	68.5 %
SHAWNEE HS	13	1	3	26.5%	16.7%	54.2 %
SHELBY CO HS	43	11	23	45.9%	57.6%	75.3 %
SHELBY VALLEY HS	45	2	12	30.4%	66.7%	91.8 %
SHELDON CLARK HS	12	5	11	41.2%	55.6%	68 %
SIMON KENTON HS	20	3	12	31.6%	41.9%	59 %

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School 2011 2012	College ready 2013 2014	Bonus 2011 2012	Bonus 2012 2013	%CCR 2011 2012	%CCR 2012 2013	%CCR 2013 2014
SOMERSET HS	54	12	28	73.9%	72.9%	72.6 %
SOUTH FLOYD HS	27				42.9%	100 %
SOUTH LAUREL CO HS	18	5	7	44.8%	38.1%	34.2 %
SOUTH OLDHAM CO HS	80	15	55	65.8%	89.7%	85.2 %
SOUTH WARREN HIGH SCHOOL	71	17	27	57.1%	67.2%	72.5 %
SOUTHERN HS	83	5	27	22.2%	37.8%	68.9 %
SOUTHSIDE CTR FOR APPLIED TECH	106	23	49	27.7%	49.5%	54.4 %
SOUTHWESTERN PULASKI HS	107	26	52	60.6%	78.6%	74.7 %
SPENCER CO HS	41	25	18	53.7%	31.0%	76.2 %
TATES CREEK HS	59	33	27	59.1%	64.8%	65.9 %
TAYLOR CO HS	46	30	43	74.1%	73.4%	84 %
The Arvin Education Center	18	30	19	54.1%	50.7%	58.8 %
Thomas Nelson High School	13					51.6 %
TODD CO CENTRAL HS	37	18	31	37.3%	59.8%	65.1 %
TRIGG CO HS	70	42	51	56.3%	61.4%	67.1 %
TRIMBLE CO HS	14	1	8	25.0%	72.7%	81.8 %
UNION CO CTC	45	17	30	40.0%	48.3%	61.9 %
UNION CO HS	8	1	3	40.9%	57.1%	50 %
VALLEY HS	20	1	7	13.0%	39.5%	50 %
WAGGENER HS	13	13	16	29.3%	50.0%	68.4 %
WALTON VERONA HS	75	30	27	81.1%	80.9%	87.5 %
WARREN CENTRAL HS	25	19	13	41.8%	36.3%	56 %
WARREN EAST HS	29	5	6	40.7%	42.6%	63 %
WASHINGTON CO HS	41	28	36	53.6%	76.4%	78.2 %
WAYNE CO HS	47	16	39	50.0%	74.7%	73.5 %
WEBSTER CO HS	17	9	9	35.0%	32.8%	53.7 %
WEST CARTER HS	32	15	26	37.9%	83.3%	69.2 %
WESTERN HILLS HS	26	13	18	38.7%	55.2%	61.7 %

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School 2011 2012	College ready 2013 2014	Bonus 2011 2012	Bonus 2012 2013	%CCR 2011 2012	%CCR 2012 2013	%CCR 2013 2014
WESTERN HS	7	4	4	25.0%	41.8%	57.1 %
WHITLEY CO HS	53	18	49	58.1%	89.3%	79.8 %
WILLIAMSBURG IND HS	6	3	6	83.3%	88.9%	85.7 %
WILLIAMSTOWN SR HIGH	8			60.0%	71.4%	88.9 %
WOLFE CO HS	29	15	19	43.5%	68.8%	73.2 %
WOODFORD CO HS	44	10	36	47.6%	71.4%	81.9 %

Appendix G

Institutional Review Board
Office of Research and Sponsored Programs
901 Ginger Hall
(606) 783-9370

MEMORANDUM

DATE: September 2, 2014
TO: Steven Stubbs, Michael Kessinger

FROM: Institutional Review Board (IRB)
c/o Office of Research and Sponsored Programs

SUBJECT: **Exempt Protocol #14-08-15**

On September 2, 2014 the IRB determined that your project entitled, ***An Analysis of Strategies
used in High Performing High School Career and Technical Programs in Kentucky,*** meets
the criteria to qualify as an exempt study.

In accordance with new procedures instituted by the IRB, **and because your study is exempt**,
you are not required to submit Part H (Annual Continuing Review) or a Part H (Final Report).
**However, if any revisions are made to a project or if any unexpected risks arise during
an investigation the principal investigator must submit Part H (Change of Status) to the
IRB, fully explaining all changes or unexpected risks. It is your responsibility to notify
the IRB prior to making any changes to the study. Please note that changes made to an
exempt protocol may disqualify it from exempt status and may require an expedited or
full-board review.**

Your exempt protocol is approved for six years. At the end of six years the protocol will close and
interaction with human subjects must cease. If you would like to continue your project, you must
submit a new exemption application and have it approved before the project can continue.

If you have any questions, contact the Office of Research and Sponsored Programs
at (606)-783-2010.

pc: IRB File

VITA

STEVEN A. STUBBS

EDUCATION

December, 2006   Bachelor of Science
                     Northern Kentucky University
                     Highland Heights, Kentucky

July, 2008   Master of Science
                     Eastern Kentucky University
                     Richmond, Kentucky

Pending   Doctor of Education
                     Morehead State University
                     Morehead, Kentucky

PROFESSIONAL EXPERIENCES

2011-Present   Adjunct Faculty
                     Morehead State University
                     Morehead, Kentucky

2010-Present   Morehead State CTE Advisory Board
                     Chair 2014 to present

2009-Present   Principal, Coordinator Career and Technical Education
                     Carter County Career and Technical Center
                     Carter County Schools
                     Olive Hill, Kentucky

1999-2009   Graphic Arts Instructor, SkillsUSA Advisor
                     Newport High School
                     Newport Schools
                     Newport, Kentucky

1993-1996   Associate Executive Director
                     Columbia Parkway YMCA
                     YMCA of Greater Cincinnati
                     Cincinnati, Ohio

<u>HONORS</u>

2013   National Honor Society
                             Phi Kappa Phi Morehead State Chapter
                             Morehead, Kentucky

2007   Outstanding Student Industrial Education Technology
                             Northern Kentucky University
                             Highland Heights, Kentucky

2005   Educational Excellence Award
                             Northern Kentucky Council of Partners in Education
                             Florence, Kentucky

1987   National Merit Winning Photograph
                             Professional Photographers of America
                             Atlanta, Georgia