A Study of Demographic Influence and Best Practices for South Georgia Career, Technical, and Agriculture Education End-of-Pathway Assessments

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ABSTRACT

The purpose of this study was to describe the best practices used in south Georgia region CTAE programs that resulted in successful pass rates on Georgia CTAE End-of-Pathway Assessments and to propose recommended best practices to improve results for all CTAE pathways.  The top five schools from three different calculations with the highest student success were used for this study - highest 3-year average, most improved average over a 3-year period, and the greatest positive difference between actual and predicted percent of change in EOPA. Once the schools had been selected a telephone interview was conducted with each CTAE Director representing the schools. The responses became the best practices to improve student success on the EOPA.

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# ACKNOWLEDGEMENTS

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Chapter I

INTRODUCTION

Historically there has been support for Career and Technical Education (CTE) from congressional leaders. Scott and Sarkees-Wircenski (2004) reminds us that in 1862, "Congress responded to the country's need for trained skilled workers by providing support for vocational (career and technical) education" (p. 217). Congressional support for CTE has led to more increased accountability to document the quality of CTE programs. CTE has also been supported by state leaders.  In 2007 Kathy Cox, former Georgia Superintendent of Schools, reiterated the fact that Career, Technical and Agricultural Education (CTAE) programs are "preparing today's students to be the workforce of tomorrow like never before" through rigorous and relevant curriculum (Career, Technical, and Agricultural Education, 2007, p. 1). More recently private enterprises also noted the importance of career education. Diane Melley, Director of IBM Corporate Citizenship and Corporate Affairs, stated that "preparing our young people for the jobs of the future is the first and most important step in our economic development. A workforce educated for the 21st century will go a long way toward increasing employment levels, lowering poverty rates and maintaining a high quality of life for all our citizens" (Huff Post Business, 2010, para. 12).

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Historical Context

Radical changes were made in CTE legislation by Congress during the 1960s, due in part to the economic upheaval that faced the nation. Both the Vietnam War and a large number of displaced workers who could not find employment because of a lack of technology skills necessitated the federal government to enact laws to address that need. President John F. Kennedy wanted all age groups to receive the training needed for employment (Woolley & Peters, 1963). When President Kennedy first addressed Congress concerning education, he… "called for an examination of existing vocational education legislation with a view toward modernizing the acts currently in force" (Scott & Sarkees-Wircenski, 2004, p. 231). An advisory board was created that released a report in November, 1962, entitled *Education for a Changing World of Work* (p. 231). In January, 1963, President Kennedy again addressed Congress and forever changed the future of vocational education by enacting legislation that

> expanded the scope and level of vocational education programs supported through the Office of Education by replacing the Vocational Education Act of 1946 with new grant-in-aid legislation aimed at meeting the needs of individuals in all age groups for vocational training in occupations where they can find employment in today's diverse labor markets (Woolley & Peters, 1963).

Congress took the words to heart, and the Vocational Education Act of 1963 was implemented. Under this Act, ninety percent of vocational education funding was based on several states' population and used for the following:

- Vocational education for high school students;
- Vocational education for individuals who had completed or discontinued their

high school education but were available for full-time study to prepare for employment;

- Vocational education for individuals who were already employed and needed training or retraining to achieve employment stability or advancement;

- Vocational education for individuals who had academic, socioeconomic, or other handicaps that prevented them from succeeding in the regular vocational education program;

- Construction of area vocational schools; and

- Integration of ancillary services – teacher training, vocational guidance, job placement, curriculum development, state leadership, and activities to assure quality in all vocational education programs (Scott & Sarkees-Wircenski, 2004, pp. 232-232).

The Vocational Education Act of 1963 also required advisory committees to review the program's progress, and an advisory committee was established in the Office of Education to give advice on the national level for vocational education, to help establish work-study programs, and to assist states in allocating the funds where specific training was needed for their state/area (Scott & Sarkees-Wircenski, 2004). The Vocational Education Act of 1963 and the subsequent Vocational Education Amendments of 1968 provided the needed funds based on state population, advisory committees to review programs, and training for all citizens (Scott & Sarkees-Wircenski, 2004).

During the 1970s, further education amendments provided for a more specific direction for the focus of vocational education programs. Mandates were established in

the areas of career counseling; specific training for employment, relating subject matter to the needs of the students; developing 5-year plans for all state agencies; and the appointment of a state board or agency to be responsible for administration. For the first time, states were required to focus on greater accountability for their programs and their program evaluation methods (Scott & Sarkees-Wircenski, 2004). In 1976 these educational amendments were updated and included such specific requirements for vocational education accountability as the development of a national vocational education data reporting and accounting system, and the development of an evaluation system to determine effectiveness of programs (Scott & Sarkees-Wircenski, 2004, pp. 243-244).

According to Scott & Sarkees-Wircenski (2004), the Carl D. Perkins Vocational Education Act of 1984 (1984 Perkins Act) continued to mandate changes and increase accountability requirements from state reporting. Significant changes in this law included developing measures for the effectiveness of programs, requiring state to produce an annual progress report based on state objectives, and requiring a national assessment of vocational education to be reported to Congress (p. 250). The provisions of the 1984 Perkins Act reflected Congress's view that vocational education programs were best administered by the local communities who made the educational decisions, and that private and public sectors needed to work together to strengthen vocational education. It also showed a growing concern for evaluation endorsement and program outcomes (Scott & Sarkees-Wircerski, 2004).

In 1990, the Carl D. Perkins Vocational and Applied Technology Education Act was amended and extended the Carl D. Perkins Vocational Act of 1984, "which was the first time that the Act was directed towards all segments of the population" (Gordon,

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2008, p. 96). Along with the increased funding from the extended Perkins Act, additional accountability through the introduction of Tech Prep was required by vocational education (Gordon, 2008). Tech Prep was a sequence of courses beginning in high school that continued through a secondary institute resulting in a certificate or associate degree. The accountability component of an aligned sequence of courses required CTE programs to review and implement needed changes for their curriculum (U.S. Department of Education, 2009).

In addition to the new emphasis for programs leading to post-secondary occupation credentials, job competencies were to be included in CTE program. In 1991, the Secretary of Labor and members of the Secretary's Commission on Achieving Necessary Skills (SCANS) presented a report detailing skill sets needed by students and workers throughout the United States. These skill sets consisted of five competencies and a three-part foundation of skills and personal qualities needed for solid job performance (U.S. Department of Labor, 1991, p. vii). The foundation skills needed were basic skills (reading, writing, mathematics, listening, and speaking), thinking skills (creative thinking, decision making, problem solving, reasoning), and personal qualities (responsibility, self-esteem, sociability, self-management, integrity/honesty). The five competencies needed to be an effective worker were the ability to use resources, interpersonal skills, information, systems, and technology (p. vii).

> The SCANS report recommended that the required competencies be learned in
> context in the environment in which they would be applied. Thus, the need for
> collaboration between schools and employers became apparent, as did the need
> for educational reform. Guided by these factors, vocational-technical programs

were redesigned and efforts such as tech prep were initiated to respond to the SCANS challenge (Lankard, 1995, p. 2).

The emphasis for increased program accountability continued at the end of the century. In 1998 the Carl D. Perkins Vocational Technical Education Act Amendments added a number of core indicators that would be used to hold states accountable by measuring state and local performance of Career and Technical Education (CTE) programs. The core indicators included: 1) placement in employment, 2) retention in employment, 3) completion of a secondary school diploma or equivalent, 4) attainment of occupational skill, 5) attainment of academic skills, 6) fulfillment of postsecondary education, and 7) fulfillment of nontraditional employment (U.S. Department of Education, 1998).

President George W. Bush signed the No Child Left Behind (NCLB) Act in 2001 that made sweeping changes to education. "The president's plan included the four principles of stronger accountability for results, expanding flexibility and local control, expanding options for parents, and an emphasis on teaching methods that have proven effective" (Scott & Sarkees-Wircenski, 2004, p. 278). Education accountability was a primary focus of NCLB. The Carl D. Perkins Career and Technical Education Improvement Act of 2006 emphasized "strengthening the country's education and workforce development systems" (Reiter, 2006, p. 1).

States and school systems were held accountable under the previously mentioned core indicators to the Office of Vocational and Adult Education (OVAE) of the U.S. Department of Education (U.S. DOE). Local school systems reported their information to their respective state Department of Education (DOE) and the state DOEs then reported

to the U.S. DOE. The reports and the validity of their data were called into question in 2004 when an audit was conducted by the Office of Inspector General for the Department of Education. The audit reviewed the data collected from July 2, 2000, through June 30, 2001, to make sure that the information was "complete, accurate, and reliable" (Office of Inspector General, 2004, p. 4). The 2004 audit from the Office of the Inspector General revealed that:

- 30 of 53 states (57 percent) did not provide complete data;

- 18 of 53 states (34 percent) used the same performance indicators for several sub-indicators;

- Three states received incentive awards, but they had problems with the quality of data reported;

- Not every state completed the annual reports, and some states' improvement strategies were not specific to the sub-indicators (p. 4).

The final recommendations were that OVAE develop "additional procedures and controls to ensure that data submitted from the states meet the criteria of each sub-indicator, in addition to ensuring that the Perkins Act data reported are complete, accurate, and reliable" (p. 4).

Following the report there was a major reauthorization process for the Perkins Act that incorporated more accountability and program improvement, secondary-postsecondary connections, links to rigorous academics, and a stronger focus on business and industry. The Carl D. Perkins Career and Technical Education Improvement Act of 2006 (Perkins Act of 2006) required high schools to become more accountable for academic achievement based on NCLB assessments that included English, math, high

school graduation rate, and a technical attainment level based on industry standards (Gordon, 2008). The Perkins Act of 2006 placed additional accountability at the local level for reporting student achievement on the core indicators, where in previous versions of the Perkins Act the state was accountable for the totals reported (Meeder, 2008).

When signed into law, the Carl D. Perkins Career and Technical Education Improvement Act of 2006 put into effect drastic changes for vocational education. The term vocational education modified to become "career and technical education" (CTE) and Tech Prep became a separate federally funded program (Reiter, 2006, p. 1). 2006 Perkins also required the development of Programs of Study (POS) that would provide students with a coordinated, non-duplicative progression of courses in a specific concentration area that would lead to an industry-recognized credential or certificate at the postsecondary level or an associate or baccalaureate degree (Gordon, 2008). According to the National Research Center for Career and Technical Education (2010), the POS would:

- incorporate secondary and postsecondary education elements;
- include rigorous career and technical content aligned with challenging academic standards in a non-duplicative progression of courses;
- optionally include dual enrollment programs or other ways to acquire postsecondary education credits;
- lead to  industry-recognized credential or certificate at the postsecondary level, or an associate or baccalaureate degree (P.L. 109-270. Sec. 122[c][1]) (p. 2).

Two of the supporting elements of POS were more accountability and a required evaluation system. The Association for Career and Technical Education (ACTE)

president Bob Scarborough stated, "The new law reflects the positive changes being made and implemented in many career and technical education programs across the country, and ensures we are providing all students with an education that will help them succeed in the workplace and in life" (Reiter, 2006, p. 1).

The Program of Study became a pathway in which students take three sequenced courses in a particular field of interest from the National Career Clusters Framework, which has sixteen career clusters available to CTE students. The following table shows the pathway clusters

Table 1

CTE National Clusters

| | |
|---|---|
| Agriculture, Food & Natural Resources | Hospitality & Tourism |
| Architecture & Construction | Human Services |
| Arts, Audio/Video Technology & Communications | Information Technology |
| Business, Management & Administration | Law, Public Safety, Corrections & Security |
| Education and Training | Manufacturing |
| Finance | Marketing |
| Government & Public Administration | Science, Technology, Engineering & Mathematics |
| Health Science | Transportation, Distribution & Logistics |

(National Association of State Directors of Career Technical Education Consortium, 2012)

To meet the accountability requirements of the 2006 Perkins Act, the state of Georgia developed and implemented the End-of-Pathway Assessments (EOPA), to be taken when students had completed the three courses in a pathway. The EOPA was either

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a test that led to a national industry-developed certification, a national occupational assessment, a state assessment leading to a state issued license, or a certificate in a specific subject area such as cosmetology or in agriculture education where skill performance was assessed through an FFA event. The Georgia CTAE division in the Department of Education began developing the EOPAs during the 2007-2008 school term. The state CTAE staff created committees that consisted of subject matter experts and industry representatives which reviewed existing national assessments, the identification of appropriate assessments and began planning the piloting assessments for each of the pathways offered in Georgia (Woodard, 2009).

Current Context

Georgia's EOPAs were piloted in selected schools throughout the state during the 2009-2010 school year. Beginning with school year 2010-2011, systems were required to give the EOPA to the students who were pathway completers. The results of the tests for the total number of students passing/failing, along with demographic information, were sent to the state CTAE Department of Assessment at the end of the school term. The data, published on the Georgia State Report Card during 2010-2011, stated that of the 19,133 students who took an EOPA, only 6,976 students passed the various exams, which calculated to a 36.46 percent passing rate (Georgia Department of Education, 2011).

Local school systems were required to select an EOPA coordinator to be in charge of all aspects of the process, such as documenting the test takers, registering at the various testing centers, and scheduling students to take the online exams. Every pathway offered within a district's CTE program used an EOPA from various organizations that provided the accepted industry-certified exam. EOPAs were used as an indicator for the

new Georgia College and Career Ready Performance Index (CCRPI) for High Schools that replaced the Adequate Yearly Progress (AYP) reports for Georgia. The percentage of CTAE students completing a pathway and passing the EOPA for that pathway were used as a component of the ranking system for the schools on the CCRPI (Regional Educational Service Agency, 2012).

## Theoretical Framework

This research study was based on the theoretical framework of return on investment (ROI) dealing with the federal funds given to CTE programs, which was to produce successful results in the form of End-of-Pathway Assessments. "In a global economy, the single most important issue facing our country is an educated work force," stated Houston Mayor Bill White. "Somebody who lacks a high school education will have lifetime earnings that are only about 60% of those of somebody with that education. That's just the impact on personal income. There are the social costs as well" (Fields, 2008, p. 2). Return on investment works hand in hand with the Human Capital Theory which, according to Fitzsimons (1999), is "the basis for national state structural policy frameworks and is the enhancement of *labour flexibility* through regulatory reform in the labour [labor] market, as well as raising skill levels by additional investment in education, training and employment schemes" (p. 2).

Burke and Minassians (2002), reminded us that ROI was composed of indicators that included inputs, process measures, outputs, and outcomes. Inputs were the resources that supported programs such as funding, enrollment, and staffing. Process measures were the components to deliver programs such as assessments, use of technology, and professional development to instructors. Outputs were the products produced. In CTE, the

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product was the students completing a pathway, passing End-of-Pathway Assessments, or graduating from high school. Outcomes were the benefits to students, communities, and society.

According to Hollenbeck (2011), return on investments were " … based on estimates of the net impact of CTE on individuals' labor market experiences and government income supports after encountering programs" (p. 2). "As states redefine their CTE programs in response to reforms in Perkins funding, they should seek policy levers to encourage the creation of pathways" which had the accountability of having students pass the end-of-pathway assessment (Karp, 2008, p. 17).

Three reasons for conducting ROI for CTE were meeting accountability requirements, improving programs, and marketing, according to Kotamraju & Mettille III (2012). Meeting accountability requirements implied the need of achieving the program objectives set forth in the Perkins Act, meeting grant requirements, and making decisions concerning programs of study. Program improvement required the evaluation of the strengths and weaknesses of all programs, establishing assurance standards for the programs, and increasing the educational value of the content to the students. Marketing involved promoting successes, providing public relation opportunities, and lobbying for continued funding (National Association of State Directors of Career Technical Education Consortium, 2010). ROI helped to interpret the results of this study by applying a business lens to an education enterprise.

<div align="center">Statement of the Problem</div>

Students who completed a CTAE pathway were required to take an End-of-pathway assessment to measure knowledge and skill attainment. State aggregated

assessment data were then used to set the percentage of skill attainment, a core indicator of the Perkins Act accountability measures. The major problem faced by school systems was that the percentage of students passing the EOPA was not high enough to prove the benefits of a pathway completer program and the data reported could result in the reduction of federal funding for programs and elimination of CTAE programs.

## Purpose of the Study

The purpose of this study was to describe the best practices used in south Georgia region CTAE programs that resulted in successful pass rates on Georgia CTAE End-of-Pathway Assessments and to propose recommended best practices to improve results for all CTAE pathways.

## Research Questions

The following questions guided this research study:

1. How were school demographic factors used to explain variation in school EOPA test averages and percentage of change over the 3-year study period?

2. How were school demographic factors used to predict variation in school EOPA test averages and percentage of change over the 3-year study period?

3. What were the recommended best practices that were used by CTAE programs that had high EOPA average, greatest positive change of EOPA results, and the greatest difference between actual and predicted percent of change in EOPA?

Outcomes of the Study

The results of the study provided recommended best practices for CTAE directors that could lead to implementing strategies to improve the pass rates of EOPA for the South Georgia region. High EOPA percentage of passing students will help justify the overall goal of CTAE, which is providing students with knowledge, skills, and dispositions that will lead to employment and post-secondary success. With an increase in the number of passing scores on the EOPAs, CTAE programs can provide stronger justification for continued federal funding based on the increase of student success on passing EOPAs.

Limitations

Data collected and analyzed were from school systems within the south Georgia region and the pathways that were offered in the school districts for this region. Results from individual pathways were considered for this study. This researcher relied on the willingness of district CTE directors to provide accurate information concerning their programs. Generalizations made for CTAE programs outside the south Georgia region were limited to schools and regions with similar demographic characteristics and CTAE programs.

Assumption

The researcher assumed that all information reported was accurate and that the statements from the participants were truthful.

Definition of Key Terms

Carl D. Perkins Act:  The principal source of federal funding for the improvement of secondary and post-secondary career and technical education programs

(http://www2.ed.gov/about/offices/list/ovae/pi/cte/factsh/faq-080528.pdf). The Perkins Act required stronger academic and technical integration, collaboration between secondary and post-secondary institutions through programs of study, links to business and industry, and accountability for results (Fiscus, 2008, p. 6).

Career and Technical Education (CTE): Designed as a pathway of courses that provided students with

"coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in current or emerging professions; provided technical skills proficiency, an industry-recognized credential, a certificate, or an associate degree; and included prerequisite courses that met the requirements of this subparagraph; and included competency-based applied learning that contributed to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of an industry, including entrepreneurship, of an individual" (Threeton, 2007, p. 3).

Programs of Study (POS):  A structured sequence of academic and CTE courses aligned from secondary institutions to postsecondary institutions that led to a student earning a postsecondary-level credential (National Association of State Directors of Career Technical Education Consortium, 2012).

National Career Clusters:  A distinct grouping of occupations and industries based on knowledge and skills required by the industries. Clusters include agriculture, food and natural resources, architecture and construction, arts, audio/video technology and

communications, business management and administration, education and training, finance; government and public administration, health science, hospitality and tourism, human services, information technology, law, public safety, corrections and security, manufacturing, marketing, science, technology, engineering and mathematics, transportation, distribution and logistics (National Association of State Directors of Career Technical Education Consortium, 2012).

End-of-Pathway Assessment (EOPA):  Georgia's End-of-pathway assessment (EOPA) process was derived in direct response to the Perkins IV Legislation (Perkins Act of 2006), Core Indicator 2S1, which mandated states to implement a measurement mechanism that would ascertain the technical skill attainment level of students participating in career and technical education courses. Such mechanisms were expected to be valid and reliable technical assessments aligned with industry-validated standards (Buck, 2013, p. 5).

Human Capital Return on Investment (ROI):  Return on investment compared the results of a program to the cost of funding that program. This stressed the knowledge and skills obtained throughout educational activities such as compulsory education, postsecondary education, and vocational education (Kwon, 2009).

Adequate Yearly Progress (AYP): Accountability measure under Title I of the No Child Left Behind Act. AYP was used to determine if schools had successfully educated their students. Student test results for state tests were evaluated and compared to the state determined standards (Editorial Projects in Education Research Center, 2011).

College and Career Ready Performance Index (CCRPI): CCRPI replaced AYP for Georgia as the accountability measure for Georgia schools. CCRPI currently promotes

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college and career readiness for all students along with accountability for state standards (Georgia DOE, 2010).

Statewide Longitudinal Data System (SLDS): SLDS was provided by Georgia Department of Education through a grant which allowed schools to manage and analyze student educational data and to view individual student records for testing (Georgia Department of Education, 2010).

South Georgia Region:  The CTAE division of the Department of Education for the state of Georgia divided Georgia into three regions:  North, Central, and South. The South Georgia region CTAE districts include:

Table 2

South Georgia region CTAE Districts

| | | |
|---|---|---|
| Appling County | Decatur County | Pelham City |
| Atkinson County | Dougherty County | Pierce County |
| Bacon County | Early County | Randolph County |
| Baker County | Echols County | Screven County |
| Ben Hill County | Effingham County | Tattnall County |
| Berrien County | Glynn County | Terrell County |
| Brantley County | Grady County | Thomas County |
| Brooks County | Irwin County | Thomasville City |
| Bryan County | Jeff Davis County | Tift County |
| Bulloch County | Lanier County | Toombs County |
| Calhoun County | Lee County | Turner County |
| Camden County | Liberty County | Valdosta City |
| Charlton County | Long County | Vidalia City |
| Chatham County | Lowndes County | Ware County |
| Clinch County | McIntosh County | Wayne County |
| Coffee County | Miller County | Wilcox County |
| Colquitt County | Mitchell County | Worth County |
| Cook County | Montgomery County | |

Chapter II

REVIEW OF THE LITERATURE

Introduction

Chapter 2 provides a review of literature associated with the points of interest for this study: the accountability dealing with student performance on assessments, the challenges facing implementation, and the issues concerning core indictors associated with CTE. "Accountability for student performance is one of the two or three—if not the most prominent issues in policy at the state and local levels right now," said Richard F. Elmore, a professor at Harvard University's graduate school of education (Olson, 1999, p. 1). Accountability was brought to the forefront of education with the No Child Left Behind Act of 2001 (NCLB), and signed into law by President Bush on January 8, 2002, which was a reauthorization of the Elementary and Secondary Education Act (*Education Week*, 2011). One of the main components of NCLB was accountability dealing with student assessments. Burger (2002) stated that "Accountability tests are designed to give school leadership and policy makers a means to evaluate the effectiveness of the system's curriculum and instruction. Accountability tests are typically given at a single point in time during the school year, usually in the spring" (p. 1).

Accountability for Learning

The challenges facing education were not unknown by those who worked with education. Research on educational accountability was constantly being conducted. In his

book, <u>Holding Schools Accountable: Performance-Based Reform in Education</u>, Ladd (1996) stated:

> We perceive five main challenges for states as they move toward educational accountability: making accountability systems understandable and defensible to policymakers, educators, parents, and students; resolving issues of fairness in the design and implementation of accountability systems; focusing incentives for improvement; developing state capacity to implement and maintain accountability systems; and creating a stable political environment (p. 92).

Since states mandated accountability testing for students, there had been uneasy trust issues between policy makers, administrators, and teachers. Burger (2000) summed up the problem of trust when he stated in *Assessment and Accountability*, "The result has been assessment and accountability processes that are entirely independent of each other and that don't result in continuous improved student achievement. The assessment and accountability systems are dysfunctional" (p. 1). Martha Thurlow (2009), explained in her article, *Accountability*, on www.education.com, that accountability's primary objective was to improve the school system or specific aspects of the system. The process for achieving the goal was having a well-defined goal, measuring the progress toward the goal, determining if the goal was met or not, and identifying consequences for meeting or not meeting the desired goal. The article explained that since NCLB, more school systems were being held accountable for student performance on standardized assessment dealing with targeted goals or benchmarks in certain subjects (p. 1). In 2008, Betsy Brand of the American Youth Policy Forum, reported that "assessments that measure technical

skills need to be developed, and the federal government can support research and development of these technical assessments and ensure a strong role for industry" (p. 9).

In 2011, the Council of Chief State School Officers of Washington, D.C., made the following four recommendations for CTE pathways regarding testing:

- Develop a national common core of technical standards that builds on the National Career Cluster Knowledge and Skills statements;

- Create a national comprehensive college and career ready assessment system that measures both academic and technical knowledge and skills;

- Build high-quality technical assessments that examines proficiencies as defined by the academic and technical common cores and led to industry-recognized, nationally portable credentials; and

- Create a national clearinghouse of current industry-based assessments and related credentials/certifications (Koch & Wilhoit, 2011, p. 2).

Koch and Wilhoit (2011) also explained that CTE underwent a transformation when dealing with students. Students were to train to be lifelong learners who work on improving their skill set through education, and education was to be structured through a "comprehensive program of study" that aligned with the National Career Clusters Framework (p. 4). The research also recognized that developing assessments was to be an undertaking at the national level instead of by individual states, since the assessment of CTE programs was required for the Perkins Act of 2006.

Assessment Development

James R. Stone III (2009) explained in his article *A Perkins Challenge: Assessing Technical Skills in CTE*, that although Perkins IV required states to conduct End-of-

Pathway Assessments to their students using "state-established, industry-validated" standards, not much guidance was provided on how to accomplish creating such assessments (p. 21). Stone also mentioned three challenges for EOPA relating to the definition of a technical skill, the type of measurement, and the timing of the assessment. Prior to planning an assessment, descriptions of the knowledge and technical skill(s) and a method of measuring the knowledge and skills needed to be developed. Most professional tests were performance-based assessments, and the question arose as to whether a written questions test would be best. Most assessments were administered when a student completed the program, but questions were raised concerning assessing students while the student was involved in the program. A third party vendor, National Occupational Competency Testing Institute (NOCTI), had been commissioned to develop EOPA for CTE students (pp. 21-22).

The authors of *Up to the Challenge* discussed such skills as critical thinking, communication, collaboration, and creativity, all of which had been identified by business executives as soft skills missing by the current workforce for successful employment (Bray, Green & Kay, 2010, p. 9). They also posited that balanced assessment with multiple measures of performance were to be incorporated into both the classroom and for the end-of-pathway CTE assessments. This method allowed the students to apply their learning to real-world, career-focused problems and provided a better focus on the assessment of both the students and of the program (p. 22).

<center>Assessment as Added Value</center>

Blundell, Dearden, Meghir & Sianesi (1999) revealed in their findings on human capital that there were positive economic returns for individuals who received advanced

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training or subject specific credentials (p. 18). CTE students who completed their chosen pathway in such areas as culinary arts, cosmetology or nursing and then passed the end-of-pathway assessment received a nationally recognized credential which led to higher paying positions in the business world.

Willard Daggett (2002) in his article, *The Future of Career and Technical Education*, reminded educators that CTE programs would increasingly be challenged in terms of student enrollment unless CTE champions and leaders showed that their programs contributed to the academic success of students on standardized tests and that CTE programs could motivate students to stay in school (p. 1). Thurlow (2009) echoed Daggett by stating, "The consequences attached to the accountability systems may be simply labels assigned to the individual or group to which responsibility has been assigned, or they can involve withdrawal of funding or removal of the individual or group from continuing in the same role." (p. 1).

Theoretical Framework

The theoretical framework for this research was based on the concept of human capital (high school students) producing a return on investment (ROI) in relation to CTE EOPAs. The Perkins IV Act required all CTE completers to "master knowledge and skills that meet state-defined and industry-validated career and technical skills standards" (Schoelkopf, 2009, p. 24). The authors of *The Road Not Traveled*, (2009) explained that countries invested in more education for their population to increase productivity, raise the quality of jobs in their economy, and increase economic growth.  The authors argued that an improved labor force increased production and provided skilled workers.

Odden and Kelly (2008) explained that improving student achievement was directly related to improving the effectiveness of instructors. The authors made clear that human capital (students and teachers) were to be measured as return on investment through student performance assessments and that the data collected were to be submitted to the state level using a valid reporting system which would guide decisions for the future. The OVAE, U.S. Department of Education (2010) recommended that states follow the guidelines of the national Data Quality Campaign to submit the ten essential elements of a state longitudinal data system, and provide valid and reliable data in a timely manner. The ten elements includes, statewide student identifier, student-level enrollment data, student-level test data, information on untested students, statewide teacher identifier with a teacher-student match, student-level course completion (transcript) data, student-level SAT, ACT, and Advanced Placement exam data, student-level graduation and dropout data, ability to match student-level P-12 and higher education data, and state date audit system (http://www2.dataqualitycampaign .org/your-states-progress/10-essential-elements). "Education policymakers should create performance-focused management systems that are flexible on inputs and strict on outcomes and report reliable, high-quality information on educational outcomes" (Boser, 2011, p. 6).

The consequences for not developing a system that could be used to analyze the outcomes of CTE programs were clearly expressed by Phillips & Phillips (2008):

> Regardless of the position taken on the issue, the reasons for measurement and evaluation are intensifying. Almost all functional executives share a concern that

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they must eventually show results on investment in projects or programs.

Otherwise funds might be reduced or responsible (p. 12).

Kotamraju and Mettille (2012) reiterated that return on investment as it pertained

to CTE could be attained by working with the state's Statewide Longitudinal Data

System (SLDS), and having common protocols and standardization where possible. Also,

 … it would allow for having a common perspective on goals (outcome measures)

such as the four areas of focus within the U.S. Department of Education: (a)

strengthening POS, (b) improving data and accountability, (c) increasing teacher

effectiveness, and (d) turning around low-performing schools. Costs and benefits

can be derived from the same data platform. Program effects can be based on a

consistent set of comparators, with distributional consequences assessed

uniformly, sensitivity analyses based on a common set of parameters, and

decision rules applied using appropriate and well-defined rules (p. 27).

Georgia's SLDS not only collected data on all student information from every

school in the state, but also provided all stakeholders the information in easy-to-access

and useful data formats (Data Quality Campaign, 2010).  Bob Swiggum, Georgia

Department of Education's Chief Information Officer, has been nationally recognized for

the development of this system.

<center>Demographic Influence on Assessment</center>

Ballou (2002) explained that "the percentage of students with limited English

proficiency, the percentage eligible for free and reduced-price lunch, and the ethnic and

racial composition of the student population" will be considered as an influence on

assessments and that schools who receive low scores will use the excuse that "our

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students are harder to educate" (p. 3). "Social and economic factors such as education and levels and families living in poverty have been shown to have greater influence than any other characteristics on how well students do in school" (Bainbridge & Lasley, 2002, p. 4). Currently, in public schools, economic factors are represented by free and reduced meal status.

<div align="center">Best Practice</div>

According to McKeon (1998) "the term best practice is traditionally thought to have come from the professions of medicine and law, in which the terms good practice and best practice are everyday phrases used to describe solid, reputable, state-of-the-art work in a field" (p. 493). When looking at what should be considered "best practices" for preparing students for EOPA, Overman and Boyd (1994) reminded us that best practices deal with high results, are customer driven, and are value oriented. Edge and Richards (1998) explained that best practice for any application was clearly described and offered as models to be used by others in the same profession.

In his article, *Preparing for Standardized Tests,* Tompkins recommends five ways to prepare students for high-stakes testing, which include:

- Teaching the curriculum for the program to ensure that the teacher is teaching what will be on the test;

- Setting goals that are monitored through informal and formal assessments;

- Actively engaging students in authentic literacy activities;

- Explaining the purpose of the test to the students; and

- Balancing an approach that combines explicit instruction and authentic application (p. 2).

<div align="center">25</div>

Best practices in education were more accepted by educators if they were recommended by actual teachers that dealt with the same content and had recommendations that had been tried and proven in the classroom setting (McKeon, 1998). McKeon proposed a collaborative approach for best practices research between the researcher and the study participants and the disseminated of information to participants.

## Summary

It was apparent from the literature that there were many articles and research projects dealing with accountability in education, but not many with a focus on secondary Career and Technical Education (CTE). The return on investment theoretical framework was shown to be an appropriate model from which to view the ultimate benefit of EOPAs. Best practices came from active participates who were working with CTE and EOPAs. More research was needed, focusing on CTE providing consistent valid and reliable information when reporting from local, state, and national levels.

Chapter III

RESEARCH METHODOLOGY

Introduction

The first part of this study examined CTAE completer end-of-pathway assessment (EOPA) results and recommended best practices to promote positive EOPA outcomes. Students involved in this study were students in the 55 counties of the south Georgia region containing approximately 75 schools who had taken the EOPA. The EOPAs consisted of one of the following: a nationally, industry-recognized credentialing exam; a state licensure exam; a national occupational assessment; or a state-developed occupational assessment that was used for inclusion in the Georgia Department of Education (GA DOE) College and Career Ready Performance Index (CCRPI). The CCRPI is used by Georgia DOE to inform parents and the public how schools are performing in a more comprehensive manner in all subject areas of which CTAE EOPAs are a component of accountability (GA DOE). The second part of this study involved interviews with CTAE directors to find their recommendations for successful EOPA scores resulting in the recommended list of best practices for EOPA.

Purpose of the Study

The purpose of this study was to describe and identify the best practices used in south Georgia region CTAE programs that had resulted in high pass rates on Georgia

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CTAE EOPAs and to propose recommended best practices to improve results for all CTAE pathways.

## Research Questions

The following questions guided this research study:

1. How were school demographic factors used to explain variation in school EOPA test averages and percentage of change over the 3-year study period?

2. How were school demographic factors used to predict variation in school EOPA test averages and percentage of change over the 3-year study period?

3. What were the recommended best practices used by CTAE programs who have high EOPA average, greatest positive change of EOPA results, and the greatest difference between actual and predicted percent of change in EOPA?

## Research Design

This research study utilized a mixed methods Quantitative/Qualitative design. Johnson & Onwuegbuzie (2004) stated, "The goal of mixed methods research is not to replace either qualitative or quantitative methods but rather to draw from the strengths and minimize the weaknesses of both in single research studies" (p. 14). According to Patton (2002) "Both accountability and program improvement require comprehensive program information systems, and that program improvement systems benefit from both qualitative and quantitative information" (p. 149).

During the quantitative portion of this research design, the following individual demographic school data was collected from the 2010-2011 school year from the GA DOE website, (www.doe.k12.ga.us): the total enrollment for each high school and the total percentage of students by ethnicity, disabilities, limited English proficiency,

migration, and free/reduced reward lunch status. The 2010-2011 data was the most current data that was available for school demographics for public review from the Georgia DOE.

During the qualitative portion of this research design, the top five schools that had the highest actual percentage of passing over a 3-year period passing the EOPA, the five schools that had the highest positive change percentage of passing the EOPAs over the 3-year period, and the five schools that had the greatest difference between the predicted percentage and the average percentage of students passing the EOPA were contacted via an e-mail message seeking telephone interview participation to answer questions concerning methods promoting or hindering student success on the EOPA.

Population

The population for this study was the Career, Technology, and Agriculture Education (CTAE) directors representing approximately 75 schools from 55 counties in the CTAE's south Georgia region. A "purposeful sampling" was used for the selection of the research participants, based on their involvement in the EOPA process that makes them, according to Patton (2002) "information-rich" for the knowledge that was used for this research (p. 230). The list (N = 75) was provided by Dr. Brenda Merchant, CTAE south Georgia region Coordinator, from GA DOE. The selection of the participants had common need not only for the southern part of the state but also to have direction for producing successful end of pathway outcomes.

Data Collection Procedures

Preliminary steps to implement this research study began with the researcher seeking support for the project from Dr. Brenda Merchant, south GA Region CTAE

Director for the GA DOE. The researcher and Dr. Merchant discussed via a telephone conversation the study and its proposed benefits and possible outcomes for CTAE and the South Georgia Region. Dr. Merchant expressed her interest in the study and stated that she thought the information would be useful to other CTAE directors. She gave her permission via the initial telephone conversation and also sent an e-mail message confirmation (see Appendix A) in which she suggested sharing the results of the study with the directors in the CTAE South Georgia Region.

The first set of quantitative data was collected beginning with an e-mail message sent to all CTAE school district directors in the CTAE South Georgia Region requesting them to send a copy of the results of their CTAE programs' end-of-pathway assessment (EOPA) data for the past 3 years. The data contained the pass/fail rates of the total number of students from each pathway that were sent to the GA DOE CTAE. Data reporting methods included a spreadsheet that was initially created by GA DOE for the purpose of collecting EOPA data. The spreadsheet was used as the data collection instrument for 2 years of CTAE EOPAs. During the 2012-2013 school year the CTAE EOPA results were reported through student records sent to GA DOE. Every EOPA for 2010-2013 offered in the CTAE South Georgia Region was considered for this study. (See Appendix B for the e-mail message to be sent to school district CTAE directors.)

The second set of data collected was student demographic data for each individual school for the 2010-2011 school term. The data included the total enrollment for each high school and the total numbers of minority students, students with disabilities, limited English proficient students, migrant students, and free/reduced lunch status students. The researcher collected these data from the Georgia Department of Education Report Card

website (http://archives.gadoe.org/ReportingFW.aspx?PageReq=211&PID=61&PTID=67&CTID=217&SchoolId=ALL&T=0) which provided individual school demographic data for every school in Georgia. All data information was entered into a spreadsheet that listed each school along with their school data as reported on the GA DOE website.

Following the collection of the data, the analysis of information was conducted. The first and second sets of quantitative data were analyzed using descriptive statistics resulting in means, percentages, standard deviations, and frequency distributions. The demographic data and EOPA results were then subjected to multiple regression analysis to investigate the influence of demographic variables and EOPA results.

After the quantitative analysis was conducted, the qualitative data collection process began. The top five schools which had the highest actual percentage of passing over a 3-year period of passing the EOPA, the five schools which had the highest positive change percentage of passing the EOPAs over the 3-year period, and the five schools which had the greatest difference between the predicted percentage and the average percentage of students passing the EOPA were contacted via an e-mail message seeking telephone interview participation to answer questions concerning methods promoting or hindering student success on the EOPA (see Appendix C for a copy of the message).

Interview Procedures

The researcher followed the interview protocol outlined by Creswell (2009) in *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches,* which included the following:

- a heading (date, place, interviewer, interviewee);
- instructions for the interviewer to follow;

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- questions (including ice-breaker);

- probes for the original research questions to follow-up and ask individuals to explain in more detail or to elaborate;

- space between the questions to record responses; and

- a final thank-you statement (p. 183).

With the interviewee's permission, all interviews were audio-taped for transcription to ensure no information was missed by the researcher while writing responses. This methodology assisted in strengthening the accuracy and validity of the information collected. Interviewees were informed that the interview was being recorded when the original e-mail message was sent asking for their participation (see Appendix C).

Instrumentation

When the EOPA data information was returned via e-mail, the researcher compiled all the names of the pathways and pass/fail totals for the 3-year period for each school. These data were entered into a spreadsheet according to schools (see Appendix D). All schools submitting data were entered into the spreadsheet. The student demographic data collected from the GA DOE Report Card website was also entered into a spreadsheet. Data from the GA DOE Report Card was then entered into the Statistical Package for the Social Sciences (SPSS) program for a multiple regression data analysis.

Collected information was used to predict the percentage of students passing the EOPA. These percentages were then compared to the average percentage of passing students for each school. The top five schools that had the highest actual percentage of passing EOPA scores over a 3-year period, the five schools that had the highest positive

change percentage of passing EOPA scores over the 3-year period, and the five schools that had the greatest difference between the predicted percentage and the average percentage of students passing the EOPA were contacted for the telephone interview process for qualitative data collection. If a CTAE director chose not to participate in the telephone interview process or if a school was listed on two different lists, the next highest ranking participant was contacted. Fifteen participants were contacted for the telephone interview.

The instrumentation used for the qualitative collection of this study was a semi-structured telephone interview. This type of qualitative instrument allowed participates to respond through interactive questions (Morse & Niehaus, 2009). Creswell (2009) explained that the use of qualitative research in combination with quantitative research broadens the understanding of the study by allowing one to build upon the results of the other. An interview checklist of questions asked during the telephone interview was created using the recommendations previously mentioned from Creswell, 2009, to ensure that all interviews were consistent. The proposed questions to be used included:

1. What methods were used by your CTAE instructors to prepare students for the EOPAs?

   a. What types of assessments were given while preparing for the EOPA?

   b. Did your teachers explain the test, process, and procedures to the students?

   c. Were your students introduced to the test facilitator before the exam?

2. What strategies/procedures do you believe helped the students be so successful on the EOPAs?

a. Did your teachers learn these strategies/procedures through professional development?

3. What barriers/problems do you believe hindered students from passing the EOPA?

a. Were the students able to understand the exam questions?

4. What practices did you use to overcome them?

a. Do your teachers review the results of the EOPA for their departments?

5. Do you have any recommendations for best practices to improve CTAE EOPA results?

a. What do you and/or your teachers do that you believe would help others giving the EOPA?

The questions were designed to gather specific information dealing with EOPA, but allowed for participant free-form responses which helped "keep respondent mistakes and biases to a minimum" according to Scheuren, 2004, (p. 18). All groups were asked the exact same set of questions during the interview.

A pilot test was conducted before the actual study began to provide validity and clarity for the study questions and the interview questions used in the study. Three CTAE directors from outside the CTAE South Georgia Region were contacted via telephone seeking their participation in the pilot test. These three directors were then sent an e-mail containing the purpose for the study and the questions to be used (see Appendix E). Feedback from the pilot test was reviewed with research chair, Dr. Reynaldo Martinez, for validation purposes.

Approval from Valdosta State University's Institutional Review Board (IRB) was obtained to begin conducting the research (See Appendix M). The projected time frame for data collection was October - December, 2013.

Data Analysis

Both quantitative and qualitative analysis was used in this study. The EOPA results that were received from the directors of the CTAE South Georgia Region for the 3-year period were analyzed using measurements of central tendency. Because EOPA data are quantitative measures of schools' results from student performance on the assessments, descriptive statistics were used for data analysis. Descriptive statistics resulting in percentages, means, frequency, and standard deviations were used to express large amounts of data in a manageable form for comprehension. Collected EOPA data are totals of students taking the EOPA and the number of students passing the EOPA which is the ordinal data for this study. Ordinal data are a level of measurement that can be ranked and expressed using descriptive statistics (http://www.socialresearchmethods.net/kb/statdesc.php).

For each year of data, an average percentage of students passing the EOPA was calculated by taking the total of students passing the exam and dividing by the total of students tested. Each year was calculated the same way. The average percentage of the 3 years was then averaged to find the overall average of passing percentage for an individual school. All individual schools then had their average of the 3 years averaged to produce the overall average of passing students for all EOPAs for that individual school. This percentage was the school's average percentage of students passing the EOPA.

The highest positive percentage change was calculated as the increase in percentage of students passing EOPAs over the 3-year period. The demographic data from GA DOE which was used as the predicted average percentage of students passing the EOPA was compared to the overall 3-year average to find which school had a higher percentage passing than their predicted percentage passing.

Data from the 2010-2011 Georgia Report Card was collected for each individual participating school including total enrollment and percentage of student minority population, free/reduced status, students with disabilities, limited English proficient, and migrant student population. Again, descriptive statistics were used to determine the frequency, percentages, standard deviations, and means of each of the demographic data variables. These data represented the variables that could influence the percentage of students passing the EOPA for each school. Analysis of collected data followed the methodology recommended to be used for this type of analysis based on John W. Creswell, 2009, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. The quantitative analysis consisted of the collected data from the GADOE website, the number of actual students tested, and the number of students who passed the EOPA from each school as the variables using a multiple regression analysis constructed through SPSS. The results of the data analysis performed through SPSS yielded a predicted percentage of students passing the EOPA for each school.

The steps required for the multiple regression analysis included:

1. Identifying the variables to be used;

2. Gathering the data;

3. Using SPSS for data analysis;

4.  Testing and interpreting coefficients of the variables; and

5.  Using the model to predict a value (http://www.csulb.edu/).

Every school received a predicted passing score from the SPSS model. This value represented a baseline for each school. The predicted passing percentage and the actual passing percentage for each school was compared and yielded a score above or below the baseline.  A score for each school was ranked from highest percentage to lowest percentage. The five schools having the highest average percentage, highest positive change percentage, and the greatest difference between the predicted percentage and the actual percentage, for a total of 15 schools, were used for the interview process of this research. The interviews of the CTAE administrators of these 15 schools were used to develop a set of best practices and/or procedures for improving student performance on the EOPA.

Interview questions were open ended questions that allowed for participant responses without constraints, and a qualitative content analysis was used to clarify redundant items expressed by the participants (Elo & Kyngas, 2008). The researcher conducted qualitative analysis of interview responses to determine and identify best practices that had been implemented in programs with high EOPA results. This analysis identified common themes, strategies and practices from the interviews with the CTAE directors of high achieving programs. The analysis of the interview data from the low achieving programs yielded the identification of problems and issues that need attention in order to raise EOPA results.

Content analysis of the collected qualitative data was performed on the responses from the interviews with the CTAE directors. This analysis resulted in the development

of a list of prevalent barriers, problems and/or correlations that could have negatively impacted EOPA scores. These results were then used as a base to make recommendations for program improvement. All interview responses were coded to allow for organizing the responses into chunks or segments of text before bringing meaning to the information collected (Rossman & Rallis, 1998). Coding steps to be followed were the eight steps suggested by Creswell, 2009, which are:

1. read all transcripts first;

2. select one document, write thoughts in margins, do this for all documents;

3. make a list of topics, cluster items;

4. abbreviate the topics as codes and write the appropriate code to the topic;

5. use the most descriptive words as your topic, use these as categories;

6. alphabetize codes;

7. assemble data and perform a preliminary analysis; and

8. recode if necessary (p. 186).

Items were ranked in order of those occurring most to those occurring least. This list then became the content source to develop the list of suggested best practices for supporting student success on the EOPA from the high achieving schools.

Findings

Tables were used for reporting the analysis of both the quantitative and qualitative data. EOPAs given and the percentages of pass/fail rates for the three years, 2010-2013, for the CTAE south Georgia Region were reported.  Individual school data included demographic data were reported in other tables. Multiple regression results for each school were reported showing predicted percentage pass/fail rates.

Information collected from the telephone interviews regarding best practices and/or barriers or problems were described, categorized and reported in rank order in tables based on frequency counts. From this analysis the researcher developed a set of best practices aimed to improve Georgia CTAE EOPAs.

Chapter IV

FINDINGS

Introduction

This chapter will first review the purpose and research questions that guided this study. A description of the research methodology will be provided. The chapter will then proceed to report the results of the EOPA data as submitted by the participating CTAE school administrators. This discussion will be followed by the reporting of the multiple regression analysis to determine the predicted passing rate for each participating school. This chapter will conclude by reporting the results of the qualitative interviews that were conducted to determine best practices for preparing CTAE students to be successful in the EOPA.

The purpose of this study was to describe the best practices used in south Georgia Region CTAE programs that had resulted in successful pass rates on Georgia CTAE EOPAs and to propose recommended best practices to improve results for all CTAE pathways. The research questions that guided this study are:

1. How can school demographic factors be used to explain variation in school EOPA test averages and percentage of change over the 3-year study period?

2. How can school demographic factors be used to predict variation in school EOPA test averages and percentage of change over the 3-year study period?

3. What are the recommended best practices that are used by CTAE programs

who have high EOPA average, greatest positive change of EOPA results, and the greatest difference between actual and predicted percent of change in EOPA?

The population for this study was the schools (N = 75) located in the 55 districts of the CTAE south Georgia Region. The participation rate for the study was 49 of the 55 districts responding (89%) which represented 58 of the 75 schools (78.37%). Each of the schools reported the EOPA 3-year test data. School demographic data (2010-2011) from the GA DOE Report Card were used to determine the predicted EOPA test averages which were compared to the 3-year average EOPA passing percentages for each school. All school demographic data were used in a linear multiple regression test of statistical analysis to acquire the predicted average of passing for each school. These data were compared with the 3-year average for each school. Telephone interviews were conducted with the CTAE Directors from the top five schools that had the highest 3-year EOPA average, and the top five schools with the greatest positive change of 3-year EOPA results, the top five schools with the greatest difference between predicted versus actual percent of change in EOPA. These results led to a total of 15 interviews for the qualitative portion of this study. The qualitative responses to the open-ended questions were analyzed to determine a recommended set of best practices aimed to improve student success on the Georgia CTAE EOPAs.

<div align="center">Reporting of Results</div>

Quantitative Data Collection and Analysis

An e-mail message was sent to all participants on October 14, 2013 requesting the data for EOPA total number of students tested and total number of students passing for

the school terms 2011, 2012, and 2013. Follow-up letters and telephone calls asking for responses were sent in November and December of 2013. By January 15, 2014, 49 out of the 55 counties had responded for an 89% response rate. The 49 counties represented 58 of the total 75 schools which accounted for a 78.37% participation rate.

All response totals were entered into a Microsoft Excel spreadsheet to calculate the 3-year average. Once the data were entered into the spreadsheet an average was calculated for each year by dividing the total number of students taking the EOPA by the total number of students passing the EOPA. The 3-year average was calculated using the 2011, 2012, and 2013 total percentage passing. The list of schools was then sorted from highest percentage to lowest percentage to get the rank of schools with the highest 3-year average. As schools randomly responded a code was assigned as responses were received so that school results would not be identifiable by participants for reporting. The top five schools with the highest 3-year average were selected for the telephone interviews (see Appendix G).

The spreadsheet reveals the data that reflects the 3-year EOPA passing rates from most successful to least successful school. The data show that 16 of the schools had a 3-year average passing rate above 50% (33%). Thirty-three schools had a 3-year average passing rate of less than 50% (67%). These results indicate that over a 3-year time period one-third of the participating schools had at least 50% or more of their students passing the EOPA while two-thirds of the participating schools had less than 50% of their students passing.

Based on this data, Schools 16, 15, 23, 12, and 25, which had the highest percentage 3-year average passing rates, were selected for the qualitative portion of this

study. The 3-year average pass rates for these five schools ranged from 77% to 65%. The student enrollment for these five schools ranged from 827 - 2,836 students. Percentage of white students ranges from 52 – 95, while free and reduced lunch status is 36 – 65 percent (see Appendix H).

The same Excel spreadsheet was used to calculate the average improvement over a 3-year period. The calculation for 3-year average improvement was percentage passing for 2012 minus percentage passing for 2011 plus percentage passing for 2013 minus percentage passing for 2012 ((2012% - 2011% + (2013% - 2012%)). Schools that did not test in 2011 were not used for the top five schools. These schools that were not used in the list of top five schools for the telephone interviews have an "*^" by their code (see Appendix H).

The spreadsheet reveals the data that reflects the average 3-year improvement percentage of EOPA passing rates per participating school from greatest improvement to least improvement. The data show that the majority (N = 27) of the schools had a 3-year average improvement percentage above 10% (57%). Twenty of the schools had a 3-year average improvement percentage of less than 10% (45%). These results indicate that over a 3-year time period over half of the participating schools showed positive improvement in the percentage of students passing the EOPA.

Based on these data, Schools 30, 37, 54, 26, and 34, which had the greatest positive change of 3-year EOPA results, were selected for the qualitative portion of this study. These five schools had an average 3-year improvement percentage ranging from 42% to 68%. The student enrollment for these five schools ranged from one school having 461 students to the other four having over 1,000 (ranges 1,100 – 1,548).

Percentage of white students ranges from 6 - 66, while free and reduced lunch status is 42

– 71 percent (see Appendix H).

SPSS statistics software was used to calculate the predicted percentage passing

score for all participating schools. All student demographic data per school were

collected from the GA DOE scorecard on the DOE website

(http://archives.gadoe.org/ReportingFW.aspx?PageReq=211&PID=61&PTID

=67&CTID=217&SchoolId=ALL&T=0).  Student demographic data were collected for

each school in the CTAE south Georgia Region including: 1) enrollment, 2) percentage

of enrollment for Asian, Black, Hispanic, Native American/Alaskan Native, White,

Multiracial, 3) Students with Disabilities (SWD), 4) English Learners (EL), 5)

Free/Reduced Meal Status, and 6) Migrant (see Table 5 – Appendix I).

The results from the DOE report card for 2010-2011 showed that particular

student demographic variables had very small percentages of the entire student

population in the southern region. These variables were Asian, Native American/Alaskan

Native, Multiracial, English Learners, and Migrant status. The variables with the largest

percentage were Free/Reduced Status, White, Black, Students with Disabilities, and

Hispanic ethnicity. The student enrollment ranged from 3,001 to 294 students per school.

Within the 58 schools 22 had a student population of over 1,000 (38%), 22 had a student

population between 999 and 500 (38%), and 14 had a student population below 500

(24%). These results show an equal proportion of large and medium size schools that

participated in this study. Approximately 25% of the schools had small enrollment (see

Appendix I).

Demographic data for the eight variables of English learners (EL), migrant

(MIG), Free/Reduced Status (FR), white (W), black (B), Students with Disabilities

(SWD), Hispanic (H), and enrollment (E) were selected for entry into SPSS for a

Pearson's Correlation analysis (see Appendix J). The 5 variables with the most

meaningful correlations were then selected for entry into SPSS for a linear, multiple

regression analysis to predict the average passing EOPA scores relative to school

demographics which included enrollment (E), percentage of white (W), percentage of

English learners (EL), percentage of free/reduced meal status (FR), and percentage of

migrant (MIG). The 3-year average was used as the dependent variable with E, W, EL,

FR, and MIG being predictors. The multiple regression analysis "consists of calculations

that provide information about levels of variability within a regression model and form a

basis for tests of significance" (http://www.stat.yale.edu/Courses/1997-

98/101/anovareg.htm, para. 5).

The average passing score for EOPA was calculated from school demographics B

Unstandardized Coefficients in the following formula: .284 (3-year average) + .00008136

(E) + .003 (W) - .035 (EL) - .002 (FR) + .023 (MIG), *R Square* = .328 (see Table 3 and

Table 4).

Data results answer the first two questions of this research study, which were 1)

how can school demographic factors be used to explain variation in school EOPA test

averages and percentage of change over the 3-year study period and, 2) how can school

demographic factors be used to predict variation in school EOPA test averages and

percentage of change over the 3-year study period? The analysis shows that enrollment

with a value of .061 were not statistically significant as a single value, but when added

with the demographic of white students with a value of .009 proved to be statistically significant.  Thus, these two variables had the greatest predicted influence on student performance on EOPA. Variables that did not have influence on student performance on EOPA were EL (.096), FR (.294), and MIG (.185) as shown in Table 3.

Table 3

*Results of the Multiple Regression Analysis*

| | | Coefficients[a] | | | | |
|---|---|---|---|---|---|---|
| | | Unstandardized Coefficients | | Standardized Coefficients | | |
| Model | | B | Std. Error | Beta | t | Sig. |
| 1 | (Constant) | .284 | .175 | | 1.626 | .110 |
| | Enrollment | 8.136E-5 | .000 | .253 | 1.912 | .061 |
| | W | .003 | .001 | .360 | 2.731 | .009 |
| | EL | -.035 | .020 | -.225 | -1.695 | .096 |
| | FR | -.002 | .002 | -.157 | -1.059 | .294 |
| | MIG | .023 | .017 | .180 | 1.345 | .185 |

a. Dependent Variable: 3-year Average

Table 4

*Model Summary for R Square*

| | | Model Summary | | |
|---|---|---|---|---|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .573[a] | .328 | .263 | .15491 |

a. Predictors: (Constant), MIG, W, Enrollment, EL, FR

Enrollment and percentage of white student population had the most significant predictive influence on the EOPA when compared to the 3-year average and the percentage of change over the 3-year period for each school in the study. In other words, the demographics for students who are on free and reduced lunch status, English Learners, and migrant status cannot be used as predictors of success with regard to EOPA results.

Schools 50, 7, 45, 18, and 36 had the greatest difference between their actual percentages of passing versus their predicted percentage of passing. The student enrollment for these five schools ranged from 397 – 726. Percentage of white students ranges from 1 - 49, while percentage of students on free and reduced lunch status is 57 – 77%.

The statistical frequencies for the 3-year average, the average improvement over the 3-year period, and the difference between the actual 3-year average and the predicted average were calculated for the mean, median, standard deviation, and the range.

Table 5

*Statistical Frequencies*

| Description | Mean | Median | Standard Deviation | Range |
|---|---|---|---|---|
| 3-year average | 37% | 39% | .18 | .04 - .77 |
| Percentage of improvement of 3-year average | 18% | 14% | .29 | -.71 – 1.00 |
| SPSS predicted value | 38% | 36% | .09 | .15 - .63 |
| Difference between actual and predicted average | 2% | 3% | .16 | -.33 - .46 |

The findings from Table 5 show that the 3-year average percentage of the students passing the EOPA over a 3-year period in the south Georgia region schools was 37%. This result indicates on average that only slightly more than one-third of students taking the EOPA were successful in the south Georgia region schools. Further, the average percentage of improvement over a 3-year period for all schools in the south Georgia region was 18%. This finding shows that even though progress was made over the three years in improvement test scores, this improvement was small. It is interesting to note that the predicted SPSS value of students passing (38%) and the actual students passing over a 3-year period (37%) are within 1% of being exactly the same.
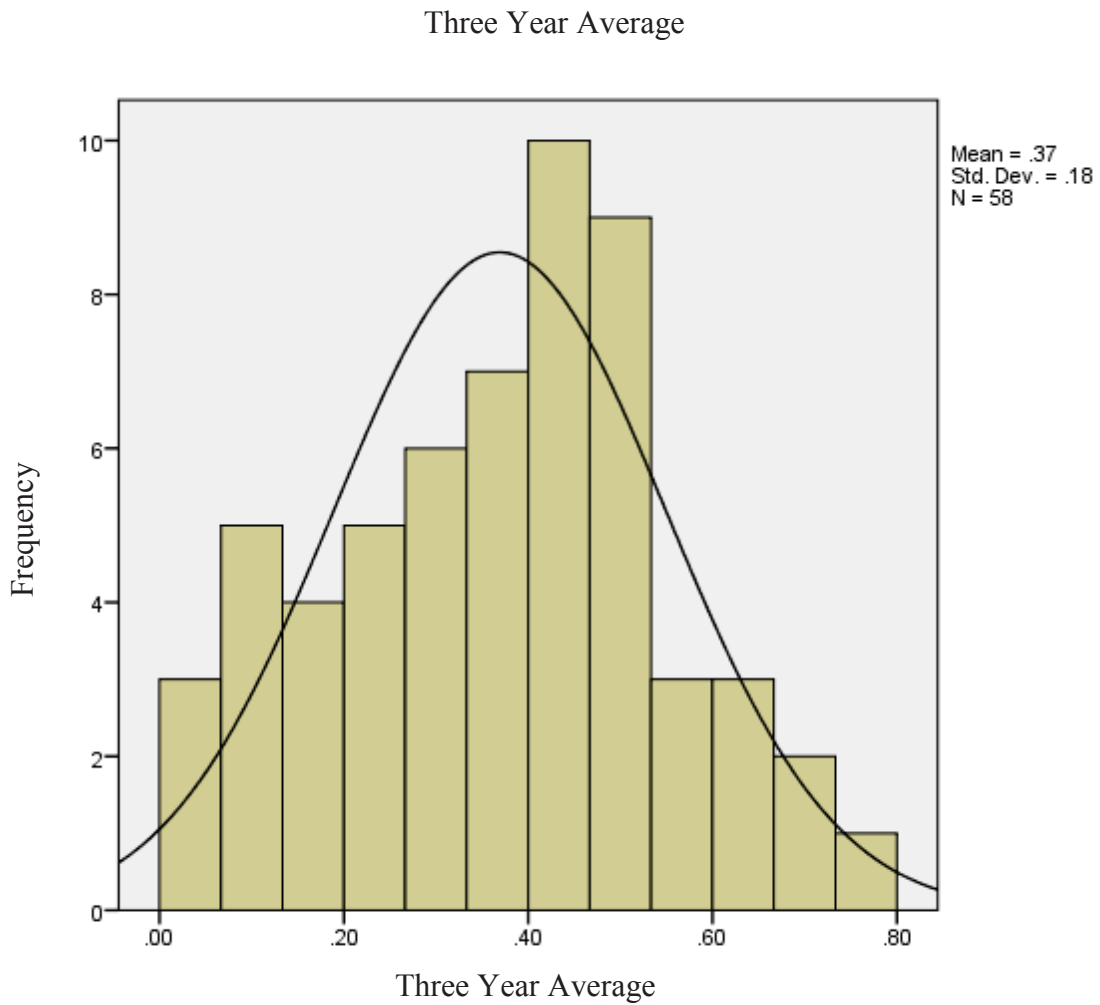
Three Year Average



Figure 1

*Overall 3-year Average*

Figure 1 shows the mean distribution of the 3-year average for all N = 58 schools that participated in the study. Comparing these means to a normal distribution shows that the range of scores was .04 to .77. The median for these data was 39% and the mean was 37%. The standard deviation was .18 that shows a degree of data validity.

Average Improvement Over 3 Year Period
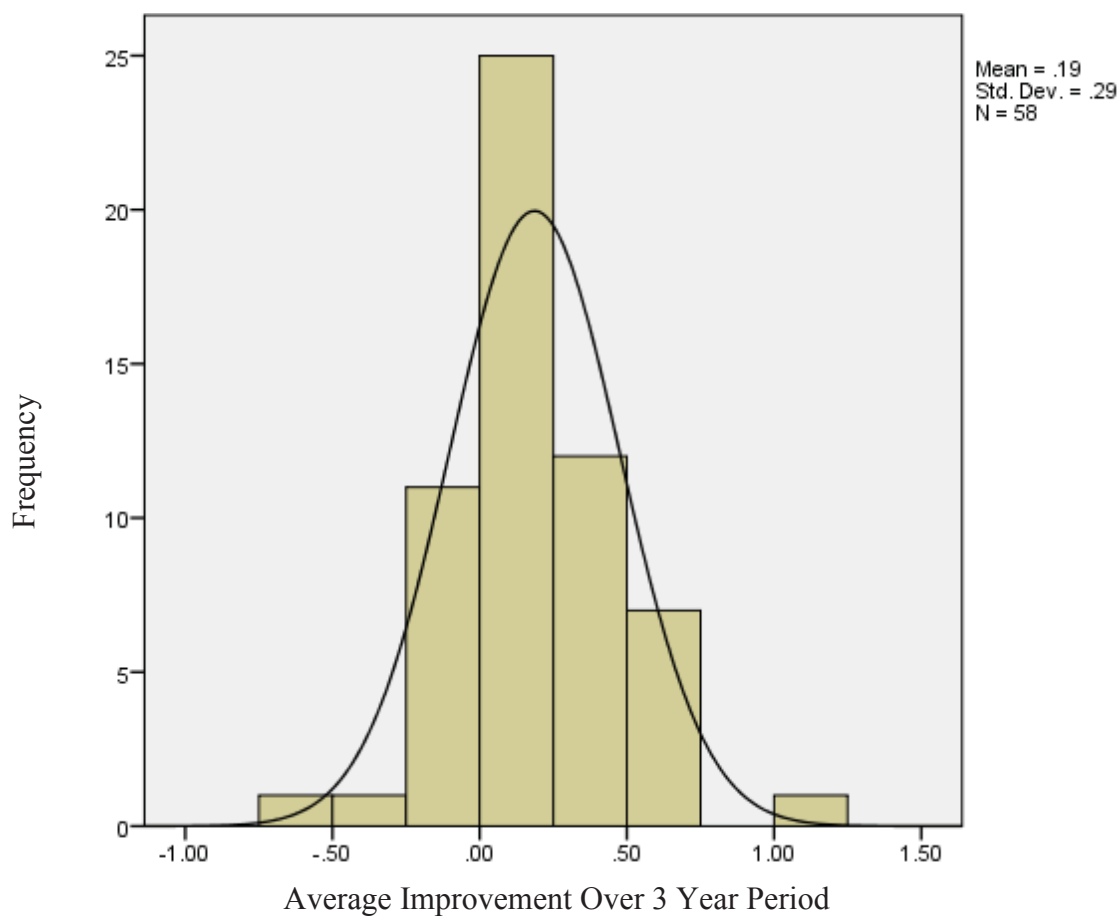


Figure 2

*Average Improvement Over 3-year Period*

Figure 2 shows the mean distribution of the average improvement over a 3-year period for all N = 58 schools that participated in the study. Comparing these means to a normal distribution shows that the range of scores was -.71 to 1.00. The median for these data was 14% and the mean was 18%. The standard deviation was .29 that shows a slight disparity in the data.
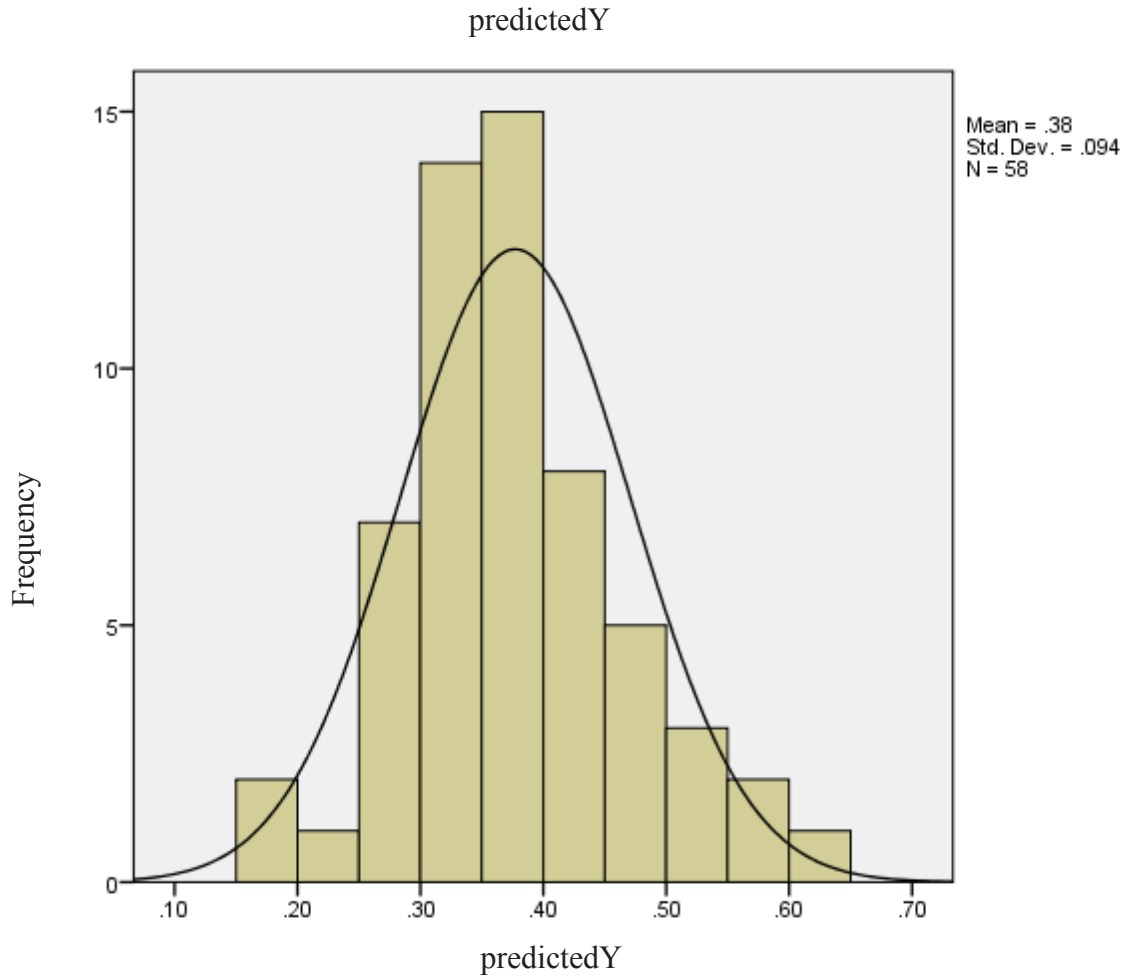
predictedY



Figure 3

*Predicted 3-year Average*

Figure 3 shows the mean distribution for the predicted 3-year average for all N = 58
schools that participated in the study. Comparing these means to a normal distribution
shows that the range of scores was .15 to .63. The median for these data was 36% and the
mean was 38%. The standard deviation was .09 that showed the predicted average was in
line with the actual 3-year average.

Histogram



Histogram
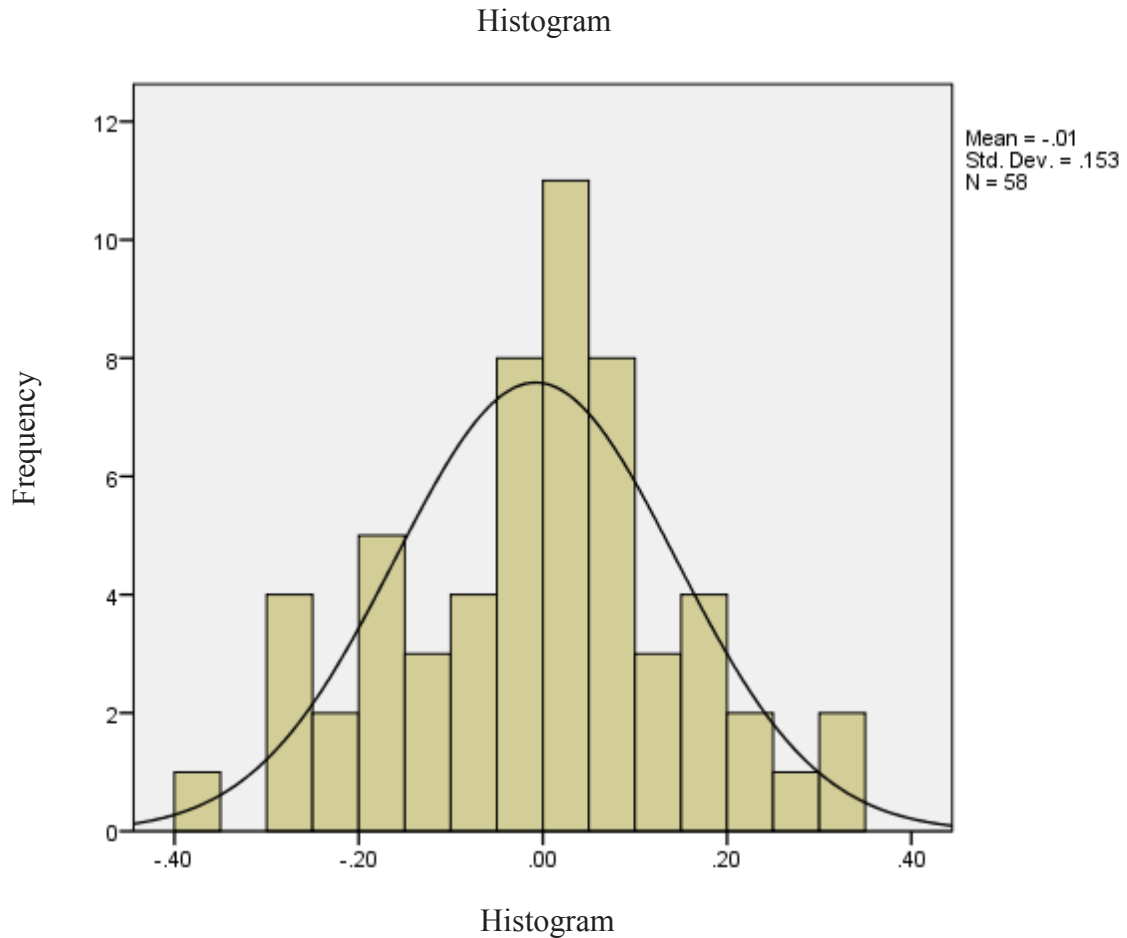
Figure 4

*Difference in the Actual Average Versus the Predicted Average*

Figure 4 shows the mean distribution for the difference in the actual average verses the predicted average for all N = 58 schools that participated in the study. Comparing these means to a normal distribution shows that the range of scores was -.33 to .46. The median for these data was 3% and the mean was 2%. The standard deviation was .16 that showed the predicted average was in line with the actual 3-year average.

It is interesting to note that several of the schools fell into more than one of the top 5 schools of the study. The following table shows the two values used in the study, enrollment and percentage of white students along with the results of each groups.

Table 6

*Fifteen Schools Used for the Study*

| School Code | Enrollment | % White | 3 YR Average | Average % Improvement over 3 YR period | Predicted Avg. vs. Actual Avg. |
|---|---|---|---|---|---|
| 16 | 827 | 78 | 77 | 2 | 35 |
| 15 | 915 | 52 | 69 | 32 | 35 |
| 23 | 931 | 95 | 67 | 44 | 13 |
| 12 | 1,311 | 74 | 66 | 37 | 15 |
| 25 | 2,836 | 63 | 65 | -4 | 7 |
| 30 | 1,062 | 6 | 20 | 61 | -4 |
| 37 | 1,256 | 24 | 44 | 57 | 7 |
| 54 | 461 | 66 | 51 | 49 | 24 |
| 26 | 1,548 | 40 | 32 | 39 | 4 |
| 34 | 1,100 | 9 | 22 | 32 | -6 |
| 7 | 441 | 49 | 45 | -71 | 22 |
| 18 | 643 | 37 | 45 | 4 | 20 |
| 50 | 397 | 54 | 6 | -17 | 20 |
| 45 | 679 | 45 | 37 | 23 | 19 |
| 36 | 726 | 1 | 33 | -47 | 13 |

Yellow – Highest 3-year Passing Average; Blue – Highest Passing Average Percentage

Improvement Over 3-year Period; Green – Highest Actual Average versus Predicted

Average

School Codes 23 and 12, which had a higher student enrollment, could have made

the list for highest average percentage improvement over 3-year period. School Codes 16,

15, and 54 could have made the list for highest predicted average versus actual average.

The schools in the last grouping of predicted average versus actual average are all schools

with less than a total enrollment of less than 800 students. School 54 has a student population of 461, which is in line with the top five schools in the predicted average versus actual average, but schools 16 and 15 have a student population of over 800 students. Schools 16 and 15 have the highest actual average verses the predicted average with 35 percent but were not included in that grouping because they had the highest 3-year average.

<div align="center">Qualitative Research</div>

Once the top five schools from each category were identified from the data analysis, the researcher contacted the 15 schools, represented by 13 school districts for a follow-up telephone interview. This data gathering strategy was aimed at answering the third research question for this study, 3) what are the recommended best practices that are used by CTAE programs who have high EOPA average, greatest positive change of EOPA results, and the greatest difference between actual and predicted percent of change in EOPA? An e-mail was sent to the CTAE directors of these districts on February 21, 2014, asking for their participation in the telephone interview process (see Appendix C). If a district did not respond to the e-mail, a telephone call was made to the director asking if he or she would participate or a message was left with directions on how to reach the researcher. If a district did not respond the researcher chose the next school on each of the lists to have the total of 15 school interviewees.

All interviews were conducted by telephone and were recorded for transcription (see Appendix L). The researcher asked the same main questions to each interviewee (see Appendix F) and used follow-up questions to gather more details or explanation as needed. Participants were asked to repeat or clarify answers as necessary to insure the

accurate recording of the interview. Feedback was provided to the participants to assure them that their responses were applicable to the study (Patton, 2002).

Each response was entered into a 2010 Microsoft Excel spreadsheet (Microsoft Inc. 2010). Each question response was entered into a separate worksheet. When a response was the same as a previous response the number was listed under a column called "frequency." When looking at the responses in the spreadsheet, the response would count as one and the frequency would be the other comments made that matched the response.

<div align="center">Interview Findings</div>

Interview participants were asked the first question: What methods were used by your CTAE instructors to prepare students for the EOPAs? Although there were variations, the most frequent themes were 1) holding review sessions 2) purchasing and/or creating study guides for the students and 3) establishing value and importance of the EOPA. Concerning purchasing study materials, School Code 18 responded, "Normally, they have materials, some of them have materials that they have been given by their program directors from the state that they use, some have materials that they have purchased that they use and whatever resources that they have." School Code 6 CTAE Director stated that for an intense review "We would pull the students in, we have a break every day, and they would pull those students in during that break time and have a more intense review." Responses for Question 1:

Table 7

*What Methods Were Used by Your CTAE Instructors to Prepare Students for the EOPAs?*

| Responses | Frequency |
|---|:---:|
| Review sessions with students before testing | 19 |
| Purchased and/or created guides for students | 10 |
| Build creditability - give reasons why assessment is important | 7 |
| Change mind set of students - don't Christmas tree answers | 4 |
| Have % of success part of department goals for data room and individual teacher goals | 1 |
| Look at last year's detail reports for EOPA to know what to focus on for improvement | 1 |
| Paired weaker students with stronger students in needed area | 1 |
| Curriculum maps, blue prints, use crosswalks | 1 |

One of the methods used that appeared to help many of the schools was a data review of previous year's test takers. The CTAE Director of School Code 16 works with the school's academic coach to review previous data, explaining their process "We took the NOCTI exam, we went student by student in order to see, we pulled, for instance, it will tell you that this particular student scored a 58.8% on the technical skills. So what we did, we went through and we found the average of what area that the kids lacked the most, as far as percentage wise. Where did they lack so that in the classroom be able to

focus a little more." Schools used this data to see where the department weaknesses were so that teachers could focus on these areas for the next year's students.

The next interview question in the study asked which strategies/procedures do the interviewee believed helped the students be so successful on the EOPAs. Responses showed that teaching the students the importance of CTAE pathways and end of course assessments (EOPA) had a positive change on student results. School Code 12 Director explained that "Let them (students) see the importance of it, make the parents aware, make the teachers and the other people in the building aware, that this is a good thing that they are doing if they can pass and leave with a credential." Four of the systems recognized students at graduation by purchasing cords for those who completed a pathway and passed the EOPA. Celebrating successes was also a strong response for this question. Students were allowed to have a celebration during the school day for all who passed the EOPA. CTAE Director of School Code 53 tells how the department celebrates successful test takers, "So many kids pass, and they (teachers) will have a pizza party or something. They do incentives like that. Also we do give cords at graduation for kids who passed End-of-Pathway Assessments." Responses to Question 2:

Table 8

*What Strategies/Procedures do You Believe Helped the Students be so Successful on the EOPAs?*

| Response | Frequency |
|---|:---:|
| Students know what is expected | 6 |
| Honor cords at graduation to students who complete pathway and pass EOPA | 4 |
| Celebration activity for students who passed EOPA during the school day | 3 |
| Intense review sessions for students during school day | 3 |
| Teachers work closely together for planning standards and review sessions | 1 |
| Teaching students the importance of EOPA credentials | 1 |
| CTAE Pathway seal on diploma | 1 |
| Get teachers involved and onboard then the students will have the buy in | 1 |
| Have pathway courses in sequence and test at end course | 1 |
| Hire the right teachers for the right positions | 1 |
| When students pass the MicroSoft Office (MOS) practice test with 90 or better they then take the EOPA in that area | 1 |

In general, the responses for this question indicated that students, parents, and teachers need to be informed about the whole process of CTAE pathways and EOPAs. Having everyone informed about the process and what is expected will help with student success.

Participants were asked in question three: What barriers/problems do you believe hindered students from passing the EOPA? The overwhelming response was that the EOPAs were not aligned to the course standards in individual classrooms. The frustration was expressed in the response from School Code 25, which stated, "A lot of the stuff that we teach doesn't relate to what's on the exam. You know, it's not correlating, you know it is getting better….two years ago, when we were looking at this I said, that's ridiculous because hardly anything was matching up." Concerns were also raised regarding transferred students not having the same skills taught at the previous school. "The teacher that teaches the first two courses may not be the teacher that teaches the third course. So that teacher who is in that third course not only has to be concerned about the standards being taught in that particular class, but going back to review the standards for the other two courses" was a concern from School Code 37. Responses for Question 3:

Table 9

*What Barriers/Problems do You Believe Hindered Students from Passing the EOPA?*

| Responses | Frequency |
| --- | --- |
| EOPA and course standards do not align | 9 |
| Transfer students - teacher may not have covered all of the skills needed for EOPA | 2 |
| EOPA is not as important at EOCT | 1 |
| Remove the "stigma" of CTAE - change the mind-set of students/parents | 1 |
| Unlike EOCT - EOPA takes test at end of pathway not end of class | 1 |

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The responses indicate that barriers can be categorized as cognitive, dispositional, or programmatic. The greatest concern was voiced by the interviewees who indicated that the EOPA did not test what was taught in the pathway courses. This was exacerbated by transfer students who may not have had similar content and instruction. Many expressed that when the state changes and/or develops future pathways the EOPA would more strongly reflect the course content. Additionally, barriers related to the negative disposition held by students and parents regarding CTAE and the EOPA need to be addressed. Finally, giving of the EOPA upon completion of three courses was seen as a barrier because of the retention of content knowledge needed between the first course and the last course in a pathway, which could be 4 years.

Question 4 asked: what practices did you use to overcome them (the barriers)? Although there were numerous responses to this question (see Table 9), the most frequent responses were having review sessions, treating the EOPA like schools treat EOCT (end of course testing), and reviewing data and sharing the results with everyone. School Code 12 Director stated that, "Making parents aware of what was going because when we very first did this the parents had no idea what pathway testing was. Most of the people in the building had no idea what it was because we did it in a vacuum now it is on the testing calendar and they realize that it is important." School Code 15 administrator remarked "Pay for substitutes and have the teachers come in and look at their data and do some curriculum plotting to see are we teaching this and this." Keeping teachers involved in the entire process of EOPA would benefit teachers, parents, and students.

Table 10

*What Practices did You Use to Overcome Them?*

| Responses | Frequency |
|---|---|
| Review sessions | 8 |
| Treat like EOCT - teach standards needed for test - developed for each class | 4 |
| Changing thought process - Parents involved and realize the importance of EOPA | 1 |
| Data review sessions for teachers concerning EOPA results | 1 |
| Have teachers take the test if available for them | 1 |
| Keep all teachers informed of EOPA results for all departments | 1 |
| Address scheduling issues for students to become completers | 1 |
| Implement training on pathways and EOPA for Teachers as Advisors | 1 |

This question revealed that EOPA is a never-ending process for the teachers. Teachers must continually review data, prepare themselves and their students, and work to promote the entire EOPA to their administrators, students, and parents.

Question 5 asked if interviewees had any recommendations for best practices to improve CTAE EOPA results. This led to a combination of responses of all previous four questions (see Table 10). "Audit and improve end of pathway results. That is the process that I did today is audit and improve end of pathway results. It will start with me and of course the academic people as well, and then what we do after we decipher the data we

get with the teachers and show them what we found and just continue on and making sure

that the teachers continue with those improvements" was the suggestion from the School

Code 16 director.  Sharing practices with others was the most recommended strategy,

while other responses reiterated previous comments such as sharing successes and data

with others, data mining previous test results to find weaknesses, and changing the mind-

set of students and parents regarding CTAE and EOPA. School Code 50 director

recommended, "Get the students to buy in to the end-of-pathway assessment and it being

an important exam and actually show that they are going to have those credentials."

Table 11

*Do You have Any Recommendations for Best Practices to Improve CTAE EOPA Results?*

| Responses | Frequency |
|---|---|
| Sharing best practices with others | 4 |
| Data mining EOPA results to audit and improve future results - follow through with teachers lessons and focus on weaknesses | 4 |
| Pay for 1st EOPA testing - retest is paid by students | 3 |
| Change the mind-set of students/parents about CTAE EOPA | 1 |
| Effective teachers as advisors program | 1 |
| Let teachers teach what needs to be taught for EOPA (not necessarily the curriculum) | 1 |
| Letting teachers decide on the evaluation to be used for EOPA | 1 |
| Push MOS certification for teachers - so they will know how students feel | 1 |
| Review sessions - Treat like EOCT - review (mini cram sessions) with students | 1 |
| State DOE support | 1 |
| Test as soon as 3rd course in pathway is complete | 1 |

Suggestions for best practices reinforce that everyone (administrators, teachers, students, and parents) needed to be involved in the EOPA process. Data should be shared with all participants to ensure success for EOPA. All responses to the interview questions can be seen in Appendix L.

When looking at the interview questions from the lens of the specific study groups which included highest 3-year passing average, highest passing average percentage improvement, and highest actual average versus predicted average the results show what is the most important to each group.

Schools with Highest 3-year Passing Average

Schools 16, 15, 23, 12, and 25 were in the group of highest 3-year passing average. The responses from this group are listed below in Table 12. The thematic trend from these responses focuses on the use of EOPA score results for improvement and strengthening the value of important of EOPA for everyone.  School Code 23 Director explains that, "we give a purpose for the EOPA, they (everyone) saw and understood what the purpose was." Responses to Question 1:

Table 12

*What Methods Were Used by Your CTAE Instructors to Prepare Students for the EOPAs?*

| Responses | Frequency |
|---|---|
| Change the mindset of students, faculty, community | 1 |
| Data mining on EOPA scores | 1 |
| Follow the standards that relate to the EOPA | 1 |
| Give the students a purpose/reason for the EOPA | 1 |
| Make percentage of success part of department goals | 1 |
| Review the EOPA and standards | 1 |
| Test students during 3rd course of pathway | 1 |
| Treat EOPA like EOCT | 1 |
| Use curriculum mapping | 1 |

Responses to Question 2 are listed below on Table 13. The two thematic trends revealed actions taken to make sure that everyone was informed about the importance and process of the EOPA and specific preparatory resources and activities, such as, the use of practice tests and study guides. School Code 16 Director sums up this by saying, "Whenever the kids enter into the program their first and second course they know that at the end of that third course that they've got to take the assessment. Matter of fact, we have kids after they get their schedule they'll come in and say, "Hey, I've got to take this third class because I've got to take my End-of-pathway assessment," because it's thought of that much. I've seen kids whenever they would fail, like for instance last year one girl

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particularly I remember she left the room crying because she failed the assessment in the

food service and I just, -- you know, it's just changing that mindset, not just the teachers but

the community and all." Responses to Question 2:

Table 13

*What Strategies/Procedures do You Believe Helped the Students be so Successful on the*

*EOPAs?*

| Responses | Frequency |
| --- | --- |
| Changing the mindset | 1 |
| Inform teachers, students, community about importance of EOPA | 1 |
| Make sure teachers and students are onboard for EOPA | 1 |
| Purchase study guides/software | 1 |
| Reviewing test results with teachers | 1 |
| Reward students who pass EOPA | 1 |
| Right teachers in the right positions | 1 |
| Schedule students for courses in sequence | 1 |
| Take practice tests when available | 1 |

Responses to Question 3 are listed below in Table 14. The most prevalent

thematic result was specific concern regarding the misalignment between the curricula

and the EOPAs. School Code 23 Director summed up the responses by saying, "…the

GPS, the standards for the class and the standards for the test didn't line up real sharply.

So that's a barrier right there." Another theme that emerged was a need to improve the value associated with the EOPA. Changing the mindset of the students was the other largest barrier/problem for schools in the highest 3-year average group. Responses to Question 3:

Table 14

*What Barriers/Problems do You Believe Hindered Students from Passing the EOPA?*

| Responses | Frequency |
| --- | --- |
| Curriculum does not align with EOPA | 4 |
| Change mindset of students towards EOPA | 2 |

Responses to Question 4 are listed below in Table 15. The emergent thematic responses were practices that used preparatory resources and strengthening the value and importance of the EOPA. School Code 12 Director stated, "…I think the biggest thing is to let them see the importance of it; make the parents aware. Make the teachers and the other people in the building aware that this is a good thing that they're doing if they can pass and be able to credential." Responses to Question 4:

Table 15

*What Practices did you Use to Overcome Them?*

| Responses | Frequency |
|---|---|
| Change the mindset of everyone towards EOPA | 2 |
| Looking student by student for what is needed | 1 |
| Purchase study guides for EOPA | 1 |
| Review EOPA data with teachers | 1 |
| Review sessions | 1 |
| Rewards for passing a EOPA | 1 |
| Teachers pick the test to give to the students | 1 |
| Teachers take the test, if possible | 1 |

Responses to Question 5 are listed below in Table 16. Responses dealing with best practices had no responses repeated. The two themes that emerged were making success special and using data for decisions and improvement. School Code 16 Director suggested, "…look at your data – look at your data…" Making success special is explained by School Code 23 Director who stated that, "We give it to them -- well, on the seniors on their honor's night I put the around their neck then, but they can wear them when they walk. And I put a seal on their diploma because, you know, they're taking the same diploma in and that's a different diploma from somebody not having any seal on it. They will walk through fire for that." Responses to Question 5:

Table 16

*Do you have Any Recommendations for Best Practices to Improve CTAE EOPA Results?*

| Responses | Frequency |
|---|:---:|
| Data mining to audit and improve EOPA results | 1 |
| Give cords for graduation | 1 |
| Let the teachers decide which evaluation to give for EOPA | 1 |
| Retest students, students pay for second test | 1 |
| Review EOPA data results with academic support, administrators, teachers | 1 |
| Review sessions like EOCT | 1 |
| Sharing successes with other schools | 1 |

When reviewing the responses for the study group 3-year highest average the researcher found the themes related to the use of specific preparation resources and activities, the developments of positive attitudes and values to EOPA, and the use of data to drive planning and improvement by the schools. Most of the responses given did not require money to accomplish the goal. The 3-year passing EOPA average for the schools ranged from 77-65 percent. Two of these schools would also qualify for the high average percentage improvement over a 3-year period and the highest actual versus predicted average. School size for the group ranged from 827-2,836 student population.

Best practice recommendations that are visible from the analysis of the responses to the interview questions for this study group are:

1. Analysis and use of test data

    a. Review test results (data mining) with teachers, administration, academic support

2. Perceived importance of EOPA

    a. Change the mindset for everyone involved with EOPA

    b. Make sure everyone knows the reasons for EOPA

    c. Set goals like for EOCT

3. Overt test preparation measures

    a. Practice tests

    b. Purchase study guides

    c. Review sessions

    d. Follow standards

4. Make success important

    a. Give rewards

    b. Graduation cords

Schools with Highest Passing Average Percentage Improvement

Schools 30, 37, 54, 26, and 34 were in the group of highest passing average percentage improvement. Schools 30, 34, and 37 are represented by one director, since all of the schools are from the same district. Responses for this group came from three directors. Responses for this group are listed below in Table 17. The most frequent theme

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for Question 1 was the use of preparatory activities in the form of review sessions. School

Code 30 Director explains that, "…we had the teachers do mini workshops with the kids

who were strong in that area. Like if you mastered mail merge we had teachers to go in

and just work with them on mail merge until they got it.…then paired the weaker ones

(students) with the stronger ones (students)." Responses to Question One:

Table 17

*What Methods Were Used by Your CTAE Instructors to Prepare Students for the EOPAs?*

| Responses | Frequency |
|---|---|
| Review sessions | 2 |
| Let the students know what is expected | 1 |
| Pair weaker students with students strong in an area | 1 |
| Try to align the curriculum taught to the EOPA | 1 |
| Use study guides (purchased or teacher created) | 1 |

Responses to Question 2 are listed below in Table 18. The most prevalent

thematic trend was the use of preparatory activities such as review sessions. Some

schools have a dedicated remediation time built into their daily schedules for teachers to

review for specific areas or concerns for the school, such as EOCT and EOPA. School

Code 54 Director explains, "…good classroom teaching first and then we know that still

people need help with these tests.  So that's probably the biggest thing is our review

sessions.  And we're fortunate that we're able to do it because, you know, they're not -- a lot

of them can't or won't come after school so we have that built in during the day so it's a

perfect opportunity for them to get in there and get some help on it." School Code 26

Director states that, "We did a lot of review for those. So there is a built in review, like

between January and March, of administrating the EOPA or whenever between January in

time for that. So with us being on a seven-period day and they have all year to be working

on it, especially getting ready for those assessments, they had some intense review-type

sessions starting after Christmas and it could go to February until time of the test."

Responses to Question 2:

Table 18

*What Strategies/Procedures do You Believe Helped the Students be so Successful on the*

*EOPAs?*

| Responses | Frequency |
| --- | --- |
| Review sessions | 3 |
| Retest students if possible | 1 |
| Teachers working together | 1 |
| Study guides, teacher created or purchased | 1 |

Responses to Question 3 are listed below in Table 19. The emergent thematic

subject for the question dealt with the low value of the importance of the EOPA. School

code 26 Director summed up the responses by saying, "So I think that's just kind of that

balance or that perception that when you go into the elective classes there is no - there is no

qualifications you have to meet at the end or there's no assessment at the end. Just getting

kids to adapt to when you come in this class you are going to have standards and structured

worked and there is going to be some type of requirement at the end of the course for you to

get certification." Responses to Question 3:

Table 19

*What Barriers/Problems do You Believe Hindered Students from Passing the EOPA?*

| Responses | Frequency |
| --- | --- |
| Advising students yearly of their options | 1 |
| Change the mindset of students, school towards EOPA | 1 |
| Curriculum does not align with EOPA | 1 |
| EOPA not treated like EOCT | 1 |
| Lower Skills from transferred students | 1 |
| Same teacher not teaching all three courses | 1 |

Responses to Question 4 are listed below in Table 20. The most prevalent

thematic response was the development of positive attitudes using rewards for EOPA

success. School Code 26 Director states, "We do seals on the diploma.  We also, once we

know who all they are in the spring, we'll do a little ceremony where we give them a

certificate and they also are to receive some type of seal on their diploma.  So we do, the

Pathway Completers do get a seal on their diploma, and it's just a sticker.  Just like we do

honors, like kids who complete the honors."  Responses to Question 4:

Table 20

*What Practices did you Use to Overcome Them?*

| Responses | Frequency |
|---|---|
| Certificate ceremony | 1 |
| Change the mindset of students | 1 |
| Create frameworks to build upon for the pathway | 1 |
| Provide CTAE seals on diploma | 1 |

Responses to Question 5 are listed below in Table 21. The strongest thematic trend refers to teachers and their role in improving EOPA results. These include teachers taking professional development, taking the EOPA, and working together within departments School Code 26 Director explained, "There's a lot of support from their administration in terms of professional development. Actually providing them (teachers) opportunities to work with their standards, building their unit and developing some activities that are really going to be relevant for the kids, maybe even get to that level of rigor they may need for that End-of-pathway assessment." Responses to Question 5:

Table 21

*Do you have Any Recommendations for Best Practices to Improve CTAE EOPA Results?*

| Responses | Frequency |
|---|---|
| Professional development for CTAE teachers for alignment | 1 |
| Review sessions | 1 |
| Standards align with EOPA | 1 |
| Teachers take the EOPA, if possible | 1 |
| Teachers working together | 1 |
| Treat EOPA like EOCT | 1 |

When reviewing the responses for the study group of highest passing average percentage improvement over a 3-year period the researcher found that the themes related to preparatory resources and activities, rewarding successes for students and developing positive attitudes and values for EOPA, and teachers and their best practices. The average percentage improvement over a 3-year period for students passing EOPA for the schools ranged from 61-32 percent. One of these schools would also qualify for the highest actual average versus predicted average high average. School size for the group ranged from 461-1,548 student population.

Best practice recommendations that are visible from the analysis of the responses to the interview questions for this study group are:

1. Teacher preparation

    a. Create frameworks to build upon for pathways

b. Professional development for CTAE teachers for alignment with EOPA

c. Teachers working together within departments

2. Perceived importance of EOPA

a. Change the mindset for everyone involved with EOPA

b. Make sure everyone knows the reasons for EOPA

c. Set goals like for EOCT

d. Advising students yearly

3. Overt test preparation measures

a. Practice tests

b. Purchase study guides

c. Review sessions

d. Pair weaker students with students strong in an area

e. Follow standards

4. Make success important

a. Give rewards

b. Graduation cords

c. Certificate ceremony

d. CTAE seals on diploma

Schools with the Highest Actual Average versus Predicted Average

Schools 7, 18, 50, 45, and 36 were in the group of highest actual average versus predicted average. Responses to Question 1 are listed below in Table 22. The two

predominant thematic responses were related to preparatory resources and activities, and rewarding successes for students passing the EOPA. School Code 50 Director explains that, "The most common way was on each exam the year that the student was going to be a completer in that particular course they (teachers) would go back, you know, and pull questions that would have been (review for EOPA) -- or they would include questions on each exam from like the first and second course and kind of as a review. …if they (teachers) gave an exam the second week of school they would begin to include those questions." Responses to Question 1:

Table 22

*What Methods Were Used by Your CTAE Instructors to Prepare Students for the EOPAs?*

| Responses | Frequency |
| --- | --- |
| Review sessions within last class | 4 |
| Use study guides (purchased or teacher created) | 3 |
| Extended learning time during the day | 1 |
| Pair weaker students with students strong in an area | 1 |
| Rewards for students who pass EOPA | 1 |

Responses to Question 2 are listed below in Table 23. The thematic trend that emerged focuses on the use of preparatory resources and activities. School Code 18 Director summed up this by stating, "I would say the teachers knowing what the content descriptors and what was on the test, all in review material that's available. If the teachers

understand what's on the test it's easier for them to do their review." Responses to Question 2:

Table 23

*What Strategies/Procedures do You Believe Helped the Students be so Successful on the EOPAs?*

| Responses | Frequency |
| --- | --- |
| Review sessions during class | 2 |
| Purchase study guides | 1 |
| Stress the importance of the test/credential – change the mindset | 1 |
| Teachers working together | 1 |

Responses to Question 3 are listed below in Table 24. The emergent thematic response was specific concerning the misalignment between the curricula and the EOPA. School Code 50 Director stated, "Well, let me think.  Probably, you know, I use those national exams and I just feel like sometimes the questions might be worded or, you know, information might be on the exam because of it being a national exam that they might be questioned on some competencies that they might not have covered. …the curriculum and the test were not necessarily aligned. You know, in fact, Ag thought that they were such a problem that they developed their own exam." School Code 7 Director explained the problem as, "...weak skills that they (students) have.  I think that's a hindrance

to me. You know, I don't think you can progress students along as fast as you could if they came to you with the skill base that they need to begin with." Responses to Question 3:

Table 24

*What Barriers/Problems do You Believe Hindered Students from Passing the EOPA?*

| Responses | Frequency |
| --- | --- |
| Curriculum not aligned to the EOPA | 3 |
| Limited skills base | 2 |
| EOPA not treated like EOCT | 1 |
| Same teacher not teaching all three courses | 1 |

Responses to Question 4 are listed below in Table 25. The most frequent thematic responses dealt with preparatory resources and activities, and also rewarding success for students passing the EOPA. School Code 18 Director stated that, "We're picking up whatever we can to review and I'm just encouraging the teachers the review as much as possible their course. As I said, this is my first year. I plan on maybe trying to put some more things in place for next year to even, you know, increase our success, but the biggest thing is just encouraging the teachers to take advantage of this 40-minute block. And most of them, the way we set up our testing our students test in that third course and so they have the students actually in class the semester that we'll be testing." Responses to Question 4:

Table 25

*What Practices did you Use to Overcome Them?*

| Responses | Frequency |
|---|---|
| Review sessions during classes | 3 |
| Cords at graduation for students who pass EOPA | 1 |
| Create frameworks to build upon for the pathway | 1 |
| Review EOPA data with teachers | 1 |
| Reward students who pass EOPA | 1 |
| Study guides (teacher created or purchased) | 1 |

Responses to Question 5 are listed below in Table 26. The thematic responses that emerged were related to the role of teachers using preparatory activities, the development of positive attitudes to increase the importance of the EOPA, and need to align curricula and the EOPA. School Code 50 Director's response represented this group, "I guess my thing would be just to get the students to buy into the End-of-Pathway assessment as being an important exam, you know, and to actually show that they're going to have those credentials and that, you know -- because now like with the CNA students, you know, they take that really serious -- you know, they take their test and, you know, they're actually certified CNAs." Responses to Question 5:

Table 26

*Do you have Any Recommendations for Best Practices to Improve CTAE EOPA Results?*

| Responses | Frequency |
|---|---|
| Change the mindset | 2 |
| Redesign curriculum taught to align with EOPA | 1 |
| Remediation program to refine skills | 1 |
| Review EOPA scores and find weaknesses to set as goals | 1 |
| Standards align with EOPA | 1 |
| Teachers take the EOPA, if possible | 1 |
| Teachers working together | 1 |
| Treat EOPA like EOCT | 1 |

When reviewing the responses for the study group of highest actual average versus predicted average the researcher found that the themes are related to preparatory resources and activities, rewarding successes for students passing the EOPA, the development of positive attitudes and values to EOPA, and the roles of teachers and best practices related to EOPA. The positive difference between highest actual average versus predicted average for the schools ranged from 22-13 percent. School size for the group ranged from 397-726 student population.

Best practice recommendations that are visible from the analysis of the responses to the interview questions for this study group are:

1.  Teacher preparation

    a.  Create frameworks to build upon for pathways

    b.  Teachers working together within departments

2.  Analysis and use of test data

    a.  Review test results (data mining) with teachers

    b.  Review EOPA scores and find weaknesses to set as goals

3.  Perceived importance of EOPA

    a.  Change the mindset for everyone involved with EOPA

    b.  Make sure everyone knows the reasons for EOPA

    c.  Set goals like for EOCT

4.  Overt test preparation measures

    a.  Extended learning time within the school day

    b.  Study guides (purchased or teacher created)

    c.  Review sessions

    d.  Pair weaker students with students strong in an area

    e.  Follow standards

5.  Make success important

    a.  Give rewards

    b.  Graduation cords

Overall Best Practice Findings

The emergent themes from each study group for each interview question are listed in Table 27. The themes for Question 1: "What methods were used by your CTAE

instructors to prepare students for the EOPAs?", had a total of three different responses and one response repeated from two groups. The theme that was repeated within the groups was the use of preparatory resources/activities, while the use of EOPA score results for improvement and strengthening the value of importance of EOPA for everyone and rewarding successes for students passing the EOPA were only repeated once.

The themes for Question 2: "What strategies/procedures do you believe helped the students to be so successful on the EOPAs?", had two responses with one of the responses being repeated from each group. The theme repeated response was the use of preparatory resources/activities. The single response themes were making sure everyone was informed about the importance and process of the EOPA.

The themes for Question 3: "What barriers/problems do you believe hindered students from passing the EOPA?", had two responses with one response being repeated in two groups. The repeated response was the misalignment between the curricula and the EOPA, while the other response was low value of importance of the EOPA. The themes for Question 4: "What practices did you use to overcome them?", which had two of the responses linked to two groups, using preparatory resources/activities and rewarding success for students passing the EOPA. The other responses included, strengthening the value and importance of the EOPA and the development of positive attitudes. The themes for Question 5: "Do you have any recommendations for best practices to improve CTAE EOPA results?", had five individual responses. The responses for this question had themes that dealt with making success special, using data for decisions and improvement, teachers and their role in improving EOPA results, the role of teachers using preparatory

activities, and the development of positive attitudes to increase the importance of the EOPA.

There are several themes that are repeated throughout the responses for the interview questions. Themes dealing with use of preparatory activities/resources, rewarding successes for students passing the EOPA, development of positive attitudes to increase the importance of the EOPA, and teachers and their role in improving EOPA were mentioned on several questions. These themes and their specific responses are "best practices" that will be presented in Chapter 5.

Table 27

*Themes Derived from Interview Questions from each Study Group*

| Question | Highest 3-year Passing Average Themes | Highest Passing Average Percentage Improvement Themes | Highest Actual Average versus Predicted Average Themes |
|---|---|---|---|
| 1 | • The use of EOPA score results for improvement and strengthening the value of importance of EOPA for everyone | • Use of preparatory activities | • Preparatory resources and activities • Rewarding successes for students passing the EOPA |
| 2 | • Making sure everyone was informed about the importance and process of the EOPA • Specific preparatory resources and activities | • Preparatory activities | • Preparatory resources and activities |
| 3 | • Misalignment between the curricula and the EOPA | • Low value of the importance of the EOPA | • Misalignment between the curricula and the EOPA |
| 4 | • Using preparatory resources and | • Development of positive attitudes | • Preparatory resources and |

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| | | | activities |
|---|---|---|---|
| | strengthening the value and importance of the EOPA | using rewards for EOPA success | • Rewarding success for students passing the EOPA |
| 5 | • Making success special<br>• Using data for decisions and improvement | • Teachers and their role in improving EOPA results | • Role of teachers using preparatory activities<br>• Development of positive attitudes to increase the importance of the EOPA<br>• Need to align curricula and the EOPA |

For students to be successful on the EOPA schools need to work on communication, letting everyone involved with EOPA be aware of what is expected, the process, and the final test results after the administration. Preparing students for the EOPA is also another key factor, purchasing or working with teachers to develop study guides, having numerous review sessions, and working with students on weaknesses will benefit the students and assure that they are equipped with the knowledge needed for the exam. Providing rewards to students that successfully pass the EOPA will help celebrate not only the passing score, but the success of the CTAE department. CTAE departments need to work on changing the mindset of students and others towards CTAE through more communication to teachers, students, parents, and the community about benefits of pathways and the EOPA process.

Chapter Summary

Chapter 4 presented the results of each data-gathering strategy of this research study. The process for collection and presentation of information was presented for every step of the study. Participants were 49 CTAE Directors from the south Georgia region which represented 58 schools representing for a 78.37 percent participation rate. School demographic data from 2010-2011 School Report Card were collected from the GA DOE website for all 58 schools in the study. CTAE Directors that participated in the study submitted their totals for the EOPA, who took the test and how many passed the test for the 3-year period 2011, 2012, and 2013.

SPSS statistics software was used for the prediction of the percentage passing the EOPA. School demographic data E, W, EL, FR, and MIG were entered in SPSS to ascertain the predicted percentage passing rate. This data were compared to the 3-year average of each school to find the schools that outperformed their predicted percentage. The SPSS data analysis showed that high enrollment and the demographic of white students were statistically significant and had the greatest influence on student performance on EOPA.

These data were used to calculate a 3-year average, the greatest positive change over the 3-year period, and the greatest difference between predicted versus actual percentage of change. The data concerning 3-year average indicated that over a 3-year time period, one-third of the participating schools had at least 50 percent or more of their students passing the EOPA while two thirds of the participating schools had less than 50 percent of their students passing. The data for the greatest positive change over the 3-year period indicated that more than 50 percent of the participating schools showed positive

improvement in the percentage of students passing the EOPA. The top five schools from

each list were used for this study. These schools were contacted via e-mail asking for

their participation in the qualitative portion of this study (Appendix C). Any school that

was at the top of more than one list was only used one time, so that a total of fifteen

different schools were used for this study.

Five questions were asked during the qualitative portion of the telephone

interviews. The answers to this question were a culmination of all previous responses:

everyone should be involved in the EOPA process, data mining should be shared with all

participants, and changing the mind-set of students and parents regarding the EOPA.

Chapter V

CONCLUSIONS

The purpose of this study was to determine best practices used in south Georgia

region Career, Technical and Agriculture Education (CTAE) programs that have resulted

in successful pass rates on Georgia CTAE End-of-Pathway Assessments (EOPA) and to

propose recommended best practices to improve results for all CTAE pathways. Since

the 2010-2011 school term, schools have administered the EOPA to those students

having completed three courses in a CTAE pathway.

Data for the study were collected in four stages. These reports are included in

Chapter 4. Demographic data were collected from the Georgia DOE website and School

Report Card for the year 2010-2011. Data collected from the DOE included total student

enrollment (E), percentage of various races, percentage of students with disabilities

(SWD), percentage of English learners (EL), percentage of students with free and

reduced lunch status (FR), and percentage of migrant students (MIG).

The second stage of the study was to collect the total number of students who

took an EOPA and total number of students who passed the EOPA from schools in the

south Georgia region for school years, 2011, 2012, and 2013. Information was collected

from e-mails sent to the CTAE director of each of the 55 districts in the region. Fifty-

eight schools responded out of the 78 schools represented, resulting in a 78.37 percent

response rate. Walker and Selfe (1996) suggested that a 70 percent response rate is

necessary in order for the study to maintain rigor. Data were entered into a Microsoft Excel spreadsheet to calculate the 3-year average of passing and the percentage of increase of passing over the 3-year period. The five schools with the highest 3-year average and the five schools with the highest percentage of increase of passing were used in this study.

Analysis of the data was the fourth stage. Demographic data and the 3-year average were used for a linear multiple regression analysis, which showed enrollment and race (white) were the most statistically significant elements that affected passing scores on the EOPA. The predicted percentage of passing was created through a multiple regression analysis which was compared to the actual 3-year passing average. The schools having the greatest difference of passing were used in this study. Along with the 10 schools previously mentioned, this provided the study with 15 schools that were used for the final telephone interviews.

Telephone interviews were conducted as the final stage of this study with 12 CTAE directors representing 15 schools who had either the highest EOPA passing rate average over a 3-year period, greatest positive change of EOPA success results, or the greatest difference between a predicted passing rate and the actual passing rate were conducted. All responses to the interview questions are listed in Chapter 4.

Conclusions from Demographic Data Findings

1. Based on the finding of the percentage passing over a 3-year period, only one third of the schools had 50 percent or more passing the EOPA, while two thirds of the schools had less than 50 percent passing the EOPA. Therefore, it can be

concluded that the vast majority of schools in the southern region have not been successful in preparing their students to pass the EOPA.

2. In the south Georgia region the findings regarding school size and successful EOPA results over a 3-year average lead to the conclusion that schools with a student enrollment greater than 800 have done better on the EOPA.

3. Based on the finding that a large student demographic of white ethnicity has a direct relationship to successful results on the EOPA, it can be concluded that schools with a lower percentage of white students struggle to reach successful results on the EOPA.

4. Based on the finding for socio-economic demographic of the 15 schools that had the highest EOPA 3-year passing average, the greatest positive change over a 3-year period for EOPA, and the highest percentage of predicted versus actual passing rate, it can be concluded that the students from the schools appear to be from middle class families.

Conclusions from EOPA Test Results

5. Based on the findings for improvement over a 3-year period, it can be concluded that the schools are making progress in helping their students be successful on the EOPA.

6. Based on the findings for greatest positive change over a 3-year period, it can be concluded that large schools in the south Georgia region appear to have achieved greater progress in preparing students to be successful on EOPA.

7. Based on the findings for percentage of white ethnicity for schools with the greatest positive change over a 3-year period, it can be concluded that schools

with a greater ethnic diversity of students are making greater progress on student success.

8. Based on the results of the multiple regression analysis regarding the demographic variables predicted influence on EOPA results, it can be concluded that large schools with a majority of white enrollment would have greater success on students passing EOPA.

9. Based on the findings for actual percentages of students passing versus their predicted percentage of passing, it can be concluded that schools with small student enrollment and a higher ethnic diversity achieved better than expected.

## Conclusions from Qualitative Interview Findings

10. Based on interview findings, strategies used to prepare students in the most successful schools included actions that addressed cognitive, dispositional, and program objectives.

11. Based on interview findings, specific themes emerged from the study groups that were used to help students to be successful when taking an EOPA.

12. Based on interview findings, schools that have student success on EOPA results made notable resource investments in the preparation of students and have achieved positive returns.

13.  Based on interview findings, there is a great misalignment between the EOPAs and the state CTAE curricula.

## Discussion of Research Questions

*Research Question 1:  How can school demographic factors be used to explain variation in school EOPA test averages and percentage of change over the 3-year study*

*period?* The most significant factors affecting EOPA results were total student enrollment and percentage of white students. The results enabled the researcher to recognize several personal biases, such as believing that the percentage of students on free and reduced lunch status, percentage of students with disabilities, and percentage of migrant students would be the biggest factor affecting predicted results. The researcher believed that there were many schools in the south Georgia region with a large migrant student population, but this proved to be false. The researcher also learned that the percentage of students with disabilities did not necessarily complete a pathway or take the EOPA as a requirement of their graduation. However, this turned out to not be a factor in the EOPA test results.

*Research Question 2: How can school demographic factors be used to predict variation in school EOPA test averages and percentage of change over the 3-year study period?* Population enrollment size and ethnicity of students may be used for predicting variation of EOPA test averages. Schools with a large student population of passing EOPA test takers are only impacted minimally by the number of students not passing which is opposed to those schools having a lower percentage of passing EOPA test takers when compared to the total student enrollment. The data showed that white students historically outperformed all other ethnicities and their results proved statistically significant when compared to the 3-year average of other students.

*Research Question 3: What are the recommended best practices that are used by CTAE programs who have high EOPA average, greatest positive change of EOPA results, and the greatest difference between actual and predicted percent of change in EOPA?* The problem of this study was related to the potential of losing funding based on

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poor EOPA results. The test result data showed that only a little over a third of the schools in the south Georgia region had 50 percent or more of their students passing over the last 3 years. Additionally, findings from the interviews indicated that the schools with the best success are investing financial and personnel resources into the preparation of students for the EOPA. The researcher observed that middle to smaller schools may not have the financial and personnel resources available to invest in their programs. Although this situation presents a challenge, it does not excuse from the possible consequences of poor test results.

The researcher noted that the most frequently mentioned barrier to EOPA test results was the misalignment of what was being taught in the classroom and the actual EOPA test. As a CTAE director, this researcher would hope that GADOE would make a concerted effort to allow teachers to modify their CTAE curriculums to align with end-of-pathway assessments to produce improved student outcomes.

The last question which asked the CTAE directors if they had any recommendations for best practices to improve CTAE EOPA results. Themes were noted by the researcher when analyzing the individual study group's response to the interview questions. The themes that appeared as a response on more than one of the groups list included:

- Use of preparatory resources and activities

- Misalignment between the curricula and the EOPA

- Development of positive attitudes towards EOPA

- Rewarding success for students passing the EOPA

- Teachers and their role in improving EOPA.

The results of this study identify practices taken to promote success and concerns with regard to the EOPA. Data collected during this study identify themes that allow all schools that offer EOPA practices which may improve student successes. The identified overarching themes resulting from this research study serve as a framework for the list of identified best practices to promote EOPA student success.

## Use of Preparatory Resources and Activities

- Hold review sessions and treat the sessions like EOCT by providing review with students,

- Use purchased study guides, teacher created study guides, and/or software,

- Provide information to students and parents about the process and expectations of the EOPA,

- Advising students yearly of their options,

- Use extended learning time during the school day for EOPA prep/review,

- Take practice tests when available.

## Rewarding Successes for Students Passing the EOPA

- Certificate program,

- Give rewards for students who pass EOPA (pizza party)

- Provide CTAE seals on diploma,

- Give cords for graduation.

## Development of Positive Attitudes Towards EOPA

- Develop a positive mind-set for teachers, students, and parents concerning CTAE EOPA,

- Treat EOPA like EOCT,

- Stress the importance of the test/credential.

### Teachers and Their Role in Improvement EOPA

- Follow the standards that relate to the EOPA,

- Encourage teachers to work together within departments,

- When available, have teachers take EOPA test,

- Data mine EOPA results to audit and improve future results - Follow through with teachers lessons and focus on weaknesses,

- Communicate with others sharing successes,

-  Make percentage of success part of department goals,

- Professional development for alignment between curricula and EOPA,

- Test as soon as third course in pathway is complete.

Best practices are not a "one size fits all" solution, but, instead, must be applied with consideration of a particular group's characteristics. Although the emergent themes of this research study appeared across all school groups, each school group reported some different practices that worked specifically for them. This was evident since each group had at least one strategy that was unique to their dynamic. Each group had at least one best practice that worked for them that was not mentioned by the other groups.

The schools in the highest 3-year passing average group had a student enrollment ranging from 827 to 2,836. These schools had a white student population ranging from 52-95 percent. Their unique best practice was data mining EOPA test results and planning their strategies to improve based on the student data results. The schools in the

highest passing average percentage improvement over 3-year period group had four schools with a student enrollment ranging from 1,062 to 1,548 and one school with 461 total students. These schools had a white student population ranging from 6-66 percent. They had 3 unique best practices which included professional development for CTAE teachers for alignment with EOPA, advising students yearly, and placing CTAE seals on diplomas. The schools in the last group of predicted EOPA average versus actual EPOA average had student enrollment ranging from 397 to 726. These schools had a white student population ranging from 1-54 percent. Their unique best practice was to provide extended learning time within the school day.

It was interesting to note that two of the specific best practices mentioned above did not add any cost to the systems, data mining EOPA test results and having extended learning time within the school day. Two of the practices, advising students yearly and placing CTAE seals on diplomas had minimal costs, while the last practice, professional development for CTAE teachers would be a large expense. This study did show that all schools are working on improving student success on EOPA results and that some best practices can be applied based on unique constellations of school characteristics.

Recommendations for Further Research

Findings and conclusions resulting from this study lead to the following recommendations for further research regarding the end-of-pathway assessment in Georgia.

1.  Conduct a research study examined the EOPA success for the entire state of Georgia, not just the south Georgia region.

2. Develop a diagnostic instrument that measures the student's depth of knowledge per course in a pathway.

3. Evaluate state developed EOPA for ethnic and culture biases.

4. Conduct research to determine the degree of resource investment in schools where students are not experiencing success on EOPA.

5. Conduct additional research on EOPAs to ensure validity of the research data.

6. Complete research on each CTAE area program's EOPA results.

7. Conduct research based on school size to see if there are specific best practices that improve student success on EOPA.

8. Conduct research for student success on EOPA based on demographic characteristics.

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APPENDIX A:

E-mail Seeking Permission for Study

May 20, 2012

Brenda

I would like to be able to send an e-mail to all CTAE directors in the south region to gather information about their EOPA participants.

Information to be gathered would be:

- Total number of participants taking an EOPA
- Total number of students passing
- Total number of students failing

This information would be collected for each pathway that is offered for the school system.  This information would be used for my Dissertation at Valdosta State University dealing with EOPA and finding best practices for passing the EOPA (not sure about the title, but this is the concept).

THANKS for considering this --

Joyce Davis
Jeff Davis County Schools
CTAE Director

APPENDIX B:

E-mail Requesting EOPA Information

E-mail to be sent to South Georgia region CTAE Directors requesting EOPA information

CTAE Directors:

My name is Joyce Davis and I am the CTAE Director for Jeff Davis County. I am currently, working on my doctoral degree at Valdosta State University. The topic of my dissertation is, "A Study of the Best Practices for South Georgia Career, Technical, and Agriculture Education End-of-Pathway Assessments." I have spoken to Dr. Brenda Merchant and my VSU doctoral committee to receive permission to contact you concerning the data needed for this study.

Could you please send me the End of Pathway pass/fail forms/information that you have sent to Mamie Hanson/DOE for the past three years, 2010-2011, 2011-2012, and 2012-2013? The data will be used along with your schools demographic information (data will be collected through DOE website 2010-2011 report card) to develop a best practices for helping students to be successful on the EOPA.

I would appreciate you sending me this information by Tuesday, October, 2013. I do realize that some of you are not working during the summer, so if you could would you please let me know, I will send a reminder for the information during the last of July. As always, I thank you for your assistance in this current endeavor.

THANKS

Joyce Davis

CTAE Director

Jeff Davis County Schools

APPENDIX C:

E-mail Seeking Permission for Telephone Interview

E-mail to CTAE Directors seeking permission for telephone interview.

CTAE Director

Thank you for participating in the collection of data for the End-of-pathway assessment documentation needed for the study concerning best practices. Your school was ranked as one of the top five schools in one of the following categories:

1. highest actual percentage of passing over a 3-year period passing the EOPA;
2. highest positive change percentage of passing the EOPAs over the 3-year period; OR
3. had the greatest difference between the predicted percentage and the average percentage of students passing the EOPA

Would you be willing to participate in a brief telephone interview to answer questions concerning your methods used to achieve this success? If you are willing to participate please respond to this e-mail with a time, date, and phone number that is convenient to you. As part of my research, I will be recording our phone conversation and this will be transcribed for validation purposes.  The recording and transcript will be destroyed at the conclusion of the study.

This interview will take approximately 15 minutes of your time. I thank you in advance for your consideration and help in this study.

If you agree now to participate and change your mind later, you are free to leave the study.  There will be no consequences to you or your school should you decide not to participate at all or to stop participating at any time in the future.  By accepting this phone interview, you indicate your voluntary agreement to participate in this study and your certification that you are 18 or older.

Questions regarding the purpose or procedures of the research should be directed to *Joyce Davis* at 912-375-7543 or [jdavis2087@bellsouth.net](mailto:jdavis2087@bellsouth.net). This study has been exempted from Institutional Review Board (IRB) review in accordance with Federal regulations.  The IRB, a university committee established by Federal law, is responsible for protecting the rights and welfare of research participants.  If you have concerns or questions about your rights as a research participant, you may contact the IRB Administrator at 229-333-7837 or irb@valdosta.edu.

Thank you

Joyce Davis

APPENDIX D:

Excel Spreadsheet used for Entering EOPA Results

# PATHWAY COMPLETER SKILLS ASSESSMENT TEST TAKERS

| System Name | System Code | School Code | Career Patway Code | EOPA Exam Code | 2011 | | | 2012 | | | 2013 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Total # of Students Tested | Total # of Students Passed | Total # of Students Failed | Total # of Students Tested | Total # of Students Passed | Total # of Students Failed | Total # of Students Tested | Total # of Students Passed | Total # of Students Failed |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| TOTALS | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| TOTALS | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| TOTALS | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| TOTALS | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| TOTALS | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

APPENDIX E:

E-mail for the Pilot Study

CTAE Directors:

My name is Joyce Davis and I am the CTAE Director for Jeff Davis County. I am currently, working on my doctoral degree at Valdosta State University. The topic of my dissertation is, "A Study of the Best Practices for South Georgia Career, Technical, and Agriculture Education End-of-Pathway Assessments." Would you be willing to participate in a "pilot" review of the research questions and interview questions to be used for this research study?

If you are willing, please respond to this e-mail and I will send you the questions for your review. Any input would be greatly appreciated.

I thank you for your assistance in this project.

THANKS

Joyce Davis

CTAE Director

Jeff Davis County Schools

APPENDIX F:

Interview Questions

1. What methods were used by your CTAE instructors to prepare students for the EOPAs?

   a. What types of assessments were given while preparing for the EOPA?

   b. Did your teachers explain the test, process, and procedures to the students?

   c. Were your students introduced to the test facilitator before the exam?

2. What strategies/procedures do you believe helped the students be so successful on the EOPAs?

   a. Did your teachers learn these strategies/procedures through professional development?

3. What barriers/problems do you believe hindered students from passing the EOPA?

   a. Were the students able to understand the exam questions?

4. What practices did you use to overcome them?

   a. Do your teachers review the results of the EOPA for their departments?

5. Do you have any recommendations for best practices to improve CTAE EOPA results?

   a. What do you and/or your teachers do that you believe would help others giving the EOPA?

APPENDIX G:

EOPA Skills Assessment Test Takers

Table 3

*EOPA Skills Assessment Test Takers*

| Code | 2011 | | | | 2012 | | | | 2013 | | | | 3-year Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total # of Students Tested | Total # of Students Passed | Total # of Students Failed | % Passing | Total # of Students Tested | Total # of Students Passed | Total # of Students Failed | % Passing | Total # of Students Tested | Total # of Students Passed | Total # of Students Failed | % Passing | |
| 16 | 68 | 56 | 12 | 82% | 178 | 114 | 64 | 64% | 109 | 92 | 17 | 84% | 77% |
| 15 | 46 | 27 | 19 | 59% | 53 | 31 | 22 | 58% | 64 | 58 | 6 | 91% | 69% |
| 23 | 49 | 25 | 24 | 51% | 176 | 95 | 81 | 54% | 43 | 41 | 2 | 95% | 67% |
| 12 | 132 | 55 | 77 | 42% | 125 | 95 | 30 | 76% | 119 | 94 | 25 | 79% | 66% |
| 25* | 27 | 27 | 0 | 100% | 0 | 0 | 0 | 0% | 147 | 141 | 6 | 96% | 65% |
| 55 | 36 | 19 | 23 | 53% | 28 | 20 | 8 | 71% | 23 | 15 | 8 | 65% | 63% |
| 38 | 33 | 24 | 9 | 73% | 41 | 15 | 26 | 37% | 44 | 30 | 13 | 68% | 59% |
| 44 | 217 | 92 | 125 | 42% | 189 | 90 | 99 | 48% | 89 | 75 | 14 | 84% | 58% |
| 53 | 569 | 246 | 323 | 43% | 604 | 359 | 245 | 59% | 174 | 112 | 62 | 64% | 56% |
| 46 | 25 | 16 | 9 | 64% | 88 | 36 | 52 | 41% | 20 | 12 | 8 | 60% | 55% |
| 1 | 105 | 61 | 44 | 58% | 112 | 62 | 50 | 55% | 217 | 94 | 123 | 43% | 52% |
| 35 | 6 | 3 | 3 | 50% | 10 | 6 | 4 | 60% | 33 | 15 | 18 | 45% | 52% |
| 24 | 49 | 21 | 28 | 43% | 40 | 22 | 18 | 55% | 55 | 31 | 24 | 56% | 51% |
| 54 | 469 | 144 | 325 | 31% | 306 | 131 | 175 | 43% | 242 | 192 | 50 | 79% | 51% |
| 51 | 39 | 14 | 25 | 36% | 11 | 6 | 5 | 55% | 37 | 22 | 15 | 59% | 50% |
| 21 | 132 | 49 | 83 | 37% | 218 | 110 | 108 | 50% | 128 | 79 | 49 | 62% | 50% |
| 6 | 382 | 169 | 213 | 44% | 412 | 190 | 222 | 46% | 343 | 196 | 147 | 57% | 49% |
| 9 | 193 | 66 | 127 | 34% | 85 | 59 | 26 | 69% | 172 | 71 | 101 | 41% | 48% |
| 42 | 85 | 11 | 74 | 13% | 88 | 41 | 47 | 47% | 69 | 56 | 13 | 81% | 47% |
| 7 | 1 | 1 | 0 | 100% | 39 | 2 | 37 | 5% | 49 | 14 | 35 | 29% | 45% |
| 18 | 114 | 45 | 69 | 39% | 113 | 57 | 56 | 50% | 87 | 38 | 49 | 44% | 45% |
| 8 | 215 | 97 | 118 | 45% | 225 | 75 | 150 | 33% | 373 | 201 | 172 | 54% | 44% |
| 37 | 5 | 0 | 5 | 0% | 24 | 18 | 6 | 75% | 28 | 16 | 12 | 57% | 44% |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **13** | 150 | 59 | 91 | 39% | 263 | 113 | 150 | 43% | 201 | 90 | 111 | 45% | 42% |
| **28** | 74 | 23 | 51 | 31% | 122 | 47 | 75 | 39% | 156 | 87 | 69 | 56% | 42% |
| **32*** | 0 | 0 | 0 | 0% | 27 | 6 | 21 | 22% | 6 | 6 | 0 | 100% | 41% |
| **56*** | 0 | 0 | 0 | 0% | 56 | 37 | 19 | 66% | 98 | 55 | 43 | 56% | 41% |
| **19*** | 0 | 0 | 0 | 0% | 38 | 20 | 18 | 53% | 16 | 11 | 5 | 69% | 40% |
| **11** | 334 | 127 | 207 | 38% | 319 | 101 | 218 | 32% | 215 | 109 | 106 | 51% | 40% |
| **29*** | 0 | 0 | 0 | 0% | 57 | 29 | 28 | 51% | 61 | 40 | 21 | 66% | 39% |
| **4** | 98 | 28 | 70 | 29% | 118 | 40 | 78 | 34% | 174 | 91 | 83 | 52% | 38% |
| **45** | 37 | 10 | 27 | 27% | 17 | 6 | 11 | 35% | 22 | 11 | 11 | 50% | 37% |
| **14** | 360 | 128 | 232 | 36% | 520 | 167 | 286 | 32% | 185 | 81 | 104 | 44% | 37% |
| **41** | 6 | 2 | 4 | 33% | 25 | 11 | 14 | 44% | 52 | 17 | 35 | 33% | 37% |
| **3*** | 13 | 7 | 6 | 54% | 0 | 0 | 0 | 0% | 102 | 56 | 46 | 55% | 36% |
| **48*** | 39 | 22 | 17 | 56% | 0 | 0 | 0 | 0% | 32 | 14 | 18 | 44% | 33% |
| **43*** | 5 | 1 | 4 | 20% | 0 | 0 | 0 | 0% | 10 | 8 | 2 | 80% | 33% |
| **36** | 33 | 0 | 33 | 65% | 65 | 10 | 55 | 15% | 56 | 10 | 46 | 18% | 33% |
| **26** | 35 | 3 | 32 | 9% | 72 | 28 | 44 | 39% | 96 | 46 | 50 | 48% | 32% |
| **22** | 26 | 5 | 21 | 19% | 51 | 20 | 31 | 39% | 53 | 16 | 37 | 30% | 30% |
| **27** | 19 | 2 | 17 | 11% | 42 | 14 | 28 | 33% | 65 | 27 | 48 | 42% | 28% |
| **10** | 56 | 16 | 40 | 29% | 145 | 38 | 107 | 26% | 68 | 17 | 51 | 25% | 27% |
| **49** | 16 | 3 | 13 | 19% | 56 | 7 | 49 | 13% | 39 | 15 | 24 | 38% | 23% |
| **31** | 32 | 13 | 19 | 41% | 89 | 6 | 83 | 7% | 43 | 9 | 34 | 21% | 23% |
| **34** | 18 | 0 | 18 | 0% | 129 | 44 | 85 | 34% | 90 | 29 | 61 | 32% | 22% |
| **30** | 35 | 0 | 35 | 0% | 30 | 0 | 30 | 0% | 36 | 22 | 14 | 61% | 20% |
| **17** | 44 | 2 | 42 | 5% | 89 | 19 | 70 | 21% | 91 | 29 | 62 | 32% | 19% |
| **5** | 12 | 0 | 12 | 0% | 20 | 1 | 19 | 5% | 25 | 12 | 13 | 48% | 18% |
| **47** | 67 | 7 | 60 | 10% | 117 | 17 | 100 | 15% | 60 | 14 | 46 | 23% | 16% |
| **40** | 175 | 28 | 147 | 16% | 146 | 16 | 130 | 11% | 124 | 18 | 106 | 15% | 14% |
| **39*** | 0 | 0 | 0 | 0% | 57 | 3 | 54 | 5% | 37 | 10 | 27 | 27% | 11% |
| **57** | 41 | 2 | 39 | 5% | 36 | 5 | 31 | 14% | 46 | 6 | 40 | 13% | 11% |
| **33** | 41 | 6 | 35 | 15% | 133 | 11 | 122 | 8% | 53 | 3 | 50 | 6% | 10% |
| **58*** | 0 | 0 | 0 | 0% | 2 | 0 | 2 | 0% | 11 | 3 | 8 | 27% | 9% |
| **20*** | 14 | 0 | 14 | 0% | 37 | 9 | 28 | 24% | 0 | 0 | 0 | 0 | 8% |
| **50*** | 12 | 2 | 10 | 17% | 0 | 0 | 0 | 0% | 11 | 0 | 11 | 0% | 6% |

| 52* | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0% | 27 | 4 | 23 | 15% | 5% |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 1 | 0 | 1 | 0% | 17 | 1 | 16 | 6% | 17 | 1 | 16 | 6% | 4% |

*Schools reporting less than 3-year of data.

APPENDIX H:

EOPA Average Improvement Over a 3-year Period

*EOPA Average Improvement Over a 3-year Period*

| Code | 2011 | | | | 2012 | | | | 2013 | | | | 3-year Average | Avg Improv 3 Yr Period |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total # of Students Tested | Total # of Students Passed | Total # of Students Failed | % Passing | Total # of Students Tested | Total # of Students Passed | Total # of Students Failed | % Passing | Total # of Students Tested | Total # of Students Passed | Total # of Students Failed | % Passing | | |
| 32*^ | 0 | 0 | 0 | 0% | 27 | 6 | 21 | 22% | 6 | 6 | 0 | 100% | 41% | 100% |
| 19*^ | 0 | 0 | 0 | 0% | 38 | 20 | 18 | 53% | 16 | 11 | 5 | 69% | 40% | 69% |
| 42 | 85 | 11 | 74 | 13% | 88 | 41 | 47 | 47% | 69 | 56 | 13 | 81% | 47% | 68% |
| 29*^ | 0 | 0 | 0 | 0% | 57 | 29 | 28 | 51% | 61 | 40 | 21 | 66% | 39% | 66% |
| 30 | 35 | 0 | 35 | 0% | 30 | 0 | 30 | 0% | 36 | 22 | 14 | 61% | 20% | 61% |
| 43* | 5 | 1 | 4 | 20% | 0 | 0 | 0 | 0% | 10 | 8 | 2 | 80% | 33% | 60% |
| 37 | 5 | 0 | 5 | 0% | 24 | 18 | 6 | 75% | 28 | 16 | 12 | 57% | 44% | 57% |
| 56*^ | 0 | 0 | 0 | 0% | 56 | 37 | 19 | 66% | 98 | 55 | 43 | 56% | 41% | 56% |
| 54 | 469 | 144 | 325 | 31% | 306 | 131 | 175 | 43% | 242 | 192 | 50 | 79% | 51% | 49% |
| 5 | 12 | 0 | 12 | 0% | 20 | 1 | 19 | 5% | 25 | 12 | 13 | 48% | 18% | 48% |
| 23 | 49 | 25 | 24 | 51% | 176 | 95 | 81 | 54% | 43 | 41 | 2 | 95% | 67% | 44% |
| 44 | 217 | 92 | 125 | 42% | 189 | 90 | 99 | 48% | 89 | 75 | 14 | 84% | 58% | 42% |
| 26 | 35 | 3 | 32 | 9% | 72 | 28 | 44 | 39% | 96 | 46 | 50 | 48% | 32% | 39% |
| 12 | 132 | 55 | 77 | 42% | 125 | 95 | 30 | 76% | 119 | 94 | 25 | 79% | 66% | 37% |
| 34 | 18 | 0 | 18 | 0% | 129 | 44 | 85 | 34% | 90 | 29 | 61 | 32% | 22% | 32% |
| 15 | 46 | 27 | 19 | 59% | 53 | 31 | 22 | 58% | 64 | 58 | 6 | 91% | 69% | 32% |
| 27 | 19 | 2 | 17 | 11% | 42 | 14 | 28 | 33% | 65 | 27 | 48 | 42% | 28% | 31% |
| 17 | 44 | 2 | 42 | 5% | 89 | 19 | 70 | 21% | 91 | 29 | 62 | 32% | 19% | 27% |
| 58* | 0 | 0 | 0 | 0% | 2 | 0 | 2 | 0% | 11 | 3 | 8 | 27% | 9% | 27% |
| 39* | 0 | 0 | 0 | 0% | 57 | 3 | 54 | 5% | 37 | 10 | 27 | 27% | 11% | 27% |
| 28 | 74 | 23 | 51 | 31% | 122 | 47 | 75 | 39% | 156 | 87 | 69 | 56% | 42% | 25% |
| 21 | 132 | 49 | 83 | 37% | 218 | 110 | 108 | 50% | 128 | 79 | 49 | 62% | 50% | 25% |
| 4 | 98 | 28 | 70 | 29% | 118 | 40 | 78 | 34% | 174 | 91 | 83 | 52% | 38% | 24% |
| 51 | 39 | 14 | 25 | 36% | 11 | 6 | 5 | 55% | 37 | 22 | 15 | 59% | 50% | 24% |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 45 | 37 | 10 | 27 | 27% | 17 | 6 | 11 | 35% | 22 | 11 | 11 | 50% | 37% | 23% |
| 53 | 569 | 246 | 323 | 43% | 604 | 359 | 245 | 59% | 174 | 112 | 62 | 64% | 56% | 21% |
| 49 | 16 | 3 | 13 | 19% | 56 | 7 | 49 | 13% | 39 | 15 | 24 | 38% | 23% | 20% |
| 52* | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0% | 27 | 4 | 23 | 15% | 5% | 15% |
| 24 | 49 | 21 | 28 | 43% | 40 | 22 | 18 | 55% | 55 | 31 | 24 | 56% | 51% | 14% |
| 6 | 382 | 169 | 213 | 44% | 412 | 190 | 222 | 46% | 343 | 196 | 147 | 57% | 49% | 13% |
| 47 | 67 | 7 | 60 | 10% | 117 | 17 | 100 | 15% | 60 | 14 | 46 | 23% | 16% | 13% |
| 11 | 334 | 127 | 207 | 38% | 319 | 101 | 218 | 32% | 215 | 109 | 106 | 51% | 40% | 13% |
| 55 | 36 | 19 | 23 | 53% | 28 | 20 | 8 | 71% | 23 | 15 | 8 | 65% | 63% | 12% |
| 22 | 26 | 5 | 21 | 19% | 51 | 20 | 31 | 39% | 53 | 16 | 37 | 30% | 30% | 11% |
| 8 | 215 | 97 | 118 | 45% | 225 | 75 | 150 | 33% | 373 | 201 | 172 | 54% | 44% | 9% |
| 14 | 360 | 128 | 232 | 36% | 520 | 167 | 286 | 32% | 185 | 81 | 104 | 44% | 37% | 8% |
| 57 | 41 | 2 | 39 | 5% | 36 | 5 | 31 | 14% | 46 | 6 | 40 | 13% | 11% | 8% |
| 9 | 193 | 66 | 127 | 34% | 85 | 59 | 26 | 69% | 172 | 71 | 101 | 41% | 48% | 7% |
| 2 | 1 | 0 | 1 | 0% | 17 | 1 | 16 | 6% | 17 | 1 | 16 | 6% | 4% | 6% |
| 13 | 150 | 59 | 91 | 39% | 263 | 113 | 150 | 43% | 201 | 90 | 111 | 45% | 42% | 5% |
| 18 | 114 | 45 | 69 | 39% | 113 | 57 | 56 | 50% | 87 | 38 | 49 | 44% | 45% | 4% |
| 16 | 68 | 56 | 12 | 82% | 178 | 114 | 64 | 64% | 109 | 92 | 17 | 84% | 77% | 2% |
| 3 | 13 | 7 | 6 | 54% | 0 | 0 | 0 | 0% | 102 | 56 | 46 | 55% | 36% | 1% |
| 20* | 14 | 0 | 14 | 0% | 37 | 9 | 28 | 24% | 0 | 0 | 0 | 0 | 8% | 0% |
| 41 | 6 | 2 | 4 | 33% | 25 | 11 | 14 | 44% | 52 | 17 | 35 | 33% | 37% | -1% |
| 40 | 175 | 28 | 147 | 16% | 146 | 16 | 130 | 11% | 124 | 18 | 106 | 15% | 14% | -1% |
| 10 | 56 | 16 | 40 | 29% | 145 | 38 | 107 | 26% | 68 | 17 | 51 | 25% | 27% | -4% |
| 46 | 25 | 16 | 9 | 64% | 88 | 36 | 52 | 41% | 20 | 12 | 8 | 60% | 55% | -4% |
| 25* | 27 | 27 | 0 | 100% | 0 | 0 | 0 | 0% | 147 | 141 | 6 | 96% | 65% | -4% |
| 35 | 6 | 3 | 3 | 50% | 10 | 6 | 4 | 60% | 33 | 15 | 18 | 45% | 52% | -5% |
| 38 | 33 | 24 | 9 | 73% | 41 | 15 | 26 | 37% | 44 | 30 | 13 | 68% | 59% | -5% |
| 33 | 41 | 6 | 35 | 15% | 133 | 11 | 122 | 8% | 53 | 3 | 50 | 6% | 10% | -9% |
| 48* | 39 | 22 | 17 | 56% | 0 | 0 | 0 | 0% | 32 | 14 | 18 | 44% | 33% | -13% |
| 1 | 105 | 61 | 44 | 58% | 112 | 62 | 50 | 55% | 217 | 94 | 123 | 43% | 52% | -15% |
| 50* | 12 | 2 | 10 | 17% | 0 | 0 | 0 | 0% | 11 | 0 | 11 | 0% | 6% | -17% |
| 31 | 32 | 13 | 19 | 41% | 89 | 6 | 83 | 7% | 43 | 9 | 34 | 21% | 23% | -20% |
| 36 | 33 | 0 | 33 | 65% | 65 | 10 | 55 | 15% | 56 | 10 | 46 | 18% | 33% | -47% |
| 7 | 1 | 1 | 0 | 100% | 39 | 2 | 37 | 5% | 49 | 14 | 35 | 29% | 45% | -71% |

* Schools reporting less than 3-year of data.   *^ Schools in top five but with less than 3 years of data.

APPENDIX I:

Demographic Data Collected

*Demographic data collected from Georgia Department of Education Report Card 2010-2011\**

| Sch Code | Enrollment # | Asian % | Black % | Hispanic % | Native Amer / Alaskan Native % | White % | Multiracial % | SWD % | EL % | Free/Reduced Status % | Migrant % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1,449 | 1 | 23 | 4 | 0 | 70 | 1 | 11 | 1 | 55 | 1 |
| 2 | 294 | 0 | 37 | 10 | 0 | 52 | 1 | 9 | 2 | 75 | 0 |
| 3 | 628 | 0 | 30 | 3 | 1 | 51 | 15 | 9 | 1 | 61 | 1 |
| 4 | 793 | 0 | 43 | 7 | 0 | 49 | 1 | 12 | 1 | 74 | 0 |
| 5 | 749 | 0 | 17 | 10 | 0 | 70 | 2 | 13 | 2 | 57 | 0 |
| 6 | 1,523 | 0 | 38 | 4 | 0 | 56 | 2 | 13 | 1 | 59 | 0 |
| 7 | 441 | 0 | 16 | 37 | 0 | 49 | 0 | 11 | 5 | 57 | 2 |
| 8 | 3,001 | 1 | 24 | 5 | 0 | 68 | 2 | 10 | 1 | 38 | 0 |
| 9 | 1,447 | 2 | 35 | 12 | 0 | 50 | 1 | 10 | 3 | 53 | 1 |
| 10 | 660 | 0 | 62 | 2 | 0 | 35 | 1 | 9 | 1 | 70 | 0 |
| 11 | 1,456 | 1 | 31 | 14 | 1 | 52 | 2 | 10 | 1 | 66 | 0 |
| 12 | 1,311 | 2 | 20 | 2 | 0 | 74 | 1 | 8 | 1 | 36 | 0 |
| 13 | 1,845 | 2 | 54 | 12 | 0 | 26 | 5 | 11 | 1 | 57 | 0 |
| 14 | 1,164 | 2 | 53 | 7 | 0 | 36 | 2 | 10 | 0 | 52 | 0 |
| 15 | 915 | 1 | 36 | 8 | 0 | 52 | 3 | 9 | 2 | 61 | 1 |
| 16 | 827 | 0 | 14 | 7 | 0 | 78 | 0 | 11 | 1 | 65 | 1 |
| 17 | 1,117 | 1 | 39 | 6 | 0 | 52 | 1 | 8 | 1 | 60 | 0 |
| 18 | 643 | 1 | 54 | 7 | 0 | 37 | 2 | 10 | 2 | 77 | 1 |
| 19 | 405 | 1 | 30 | 3 | 0 | 64 | 1 | 7 | 2 | 67 | 1 |
| 20 | 299 | 0 | 40 | 2 | 0 | 58 | 1 | 10 | 1 | 63 | 0 |

| 21 | 1,480 | 1 | 32 | 2 | 0 | 63 | 2 | 12 | 0 | 52 | 0 |
|----|-------|---|-----|----|---|----|---|----|---|----|---|
| 22 | 926 | 0 | 12 | 4 | 0 | 82 | 2 | 10 | 2 | 49 | 1 |
| 23 | 931 | 0 | 4 | 1 | 0 | 95 | 0 | 10 | 0 | 53 | 0 |
| 24 | 815 | 0 | 479 | 3 | 0 | 47 | 0 | 10 | 0 | 56 | 1 |
| 25 | 2,836 | 1 | 26 | 5 | 1 | 63 | 5 | 8 | 1 | 41 | 0 |
| 26 | 1,548 | 0 | 53 | 6 | 0 | 40 | 0 | 10 | 2 | 63 | 1 |
| 27 | 423 | 0 | 47 | 7 | 0 | 44 | 1 | 15 | 3 | 67 | 1 |
| 28 | 759 | 0 | 51 | 1 | 0 | 47 | 0 | 13 | 0 | 75 | 0 |
| 29 | 919 | 0 | 28 | 16 | 0 | 55 | 1 | 11 | 3 | 65 | 8 |
| 30 | 1,062 | 0 | 88 | 1 | 0 | 6 | 5 | 14 | 0 | 71 | 0 |
| 31 | 1,460 | 2 | 61 | 6 | 0 | 25 | 5 | 13 | 4 | 57 | 2 |
| 32 | 546 | 5 | 11 | 3 | 0 | 78 | 4 | 10 | 0 | 23 | 0 |
| 33 | 1,359 | 3 | 63 | 3 | 0 | 27 | 4 | 9 | 1 | 53 | 0 |
| 34 | 1,100 | 2 | 81 | 1 | 0 | 9 | 6 | 10 | 0 | 61 | 0 |
| 35 | 753 | 5 | 19 | 4 | 0 | 69 | 3 | 1 | 0 | 14 | 0 |
| 36 | 726 | 0 | 94 | 1 | 0 | 1 | 4 | 17 | 0 | 76 | 0 |
| 37 | 1,256 | 3 | 63 | 6 | 0 | 24 | 3 | 9 | 0 | 42 | 0 |
| 38 | 387 | 0 | 96 | 1 | 0 | 3 | 1 | 8 | 0 | 78 | 0 |
| 39 | 1,734 | 2 | 70 | 3 | 0 | 21 | 3 | 13 | 1 | 69 | 0 |
| 40 | 761 | 0 | 18 | 20 | 1 | 58 | 2 | 14 | 3 | 70 | 7 |
| 41 | 1,324 | 2 | 52 | 3 | 0 | 41 | 3 | 12 | 1 | 58 | 0 |
| 42 | 460 | 0 | 37 | 5 | 0 | 55 | 4 | 15 | 2 | 71 | 0 |
| 43 | 857 | 0 | 12 | 2 | 0 | 84 | 2 | 16 | 0 | 45 | 0 |
| 44 | 425 | 0 | 34 | 3 | 0 | 63 | 1 | 13 | 1 | 65 | 1 |
| 45 | 679 | 1 | 50 | 3 | 0 | 45 | 1 | 6 | 0 | 59 | 0 |

| 46 | 411 | 0 | 46 | 9 | 0 | 44 | 1 | 14 | 2 | 72 | 2 |
| 47 | 938 | 1 | 23 | 8 | 0 | 66 | 2 | 15 | 1 | 59 | 1 |
| 48 | 447 | 0 | 36 | 1 | 0 | 60 | 2 | 12 | 0 | 68 | 0 |
| 49 | 869 | 1 | 9 | 26 | 0 | 62 | 1 | 11 | 4 | 50 | 0 |
| 50 | 397 | 0 | 54 | 3 | 0 | 43 | 1 | 13 | 1 | 69 | 1 |
| 51 | 546 | 1 | 46 | 1 | 0 | 50 | 1 | 10 | 1 | 74 | 0 |
| 52 | 1,487 | 1 | 8 | 3 | 0 | 85 | 3 | 10 | 0 | 26 | 0 |
| 53 | 1,840 | 1 | 23 | 4 | 0 | 9 | 4 | 11 | 1 | 39 | 0 |
| 54 | 461 | 1 | 32 | 0 | 0 | 66 | 1 | 7 | 0 | 64 | 0 |
| 55 | 499 | 0 | 23 | 5 | 0 | 70 | 2 | 12 | 1 | 53 | 1 |
| 56 | 745 | 1 | 73 | 1 | 0 | 24 | 0 | 10 | 0 | 68 | 0 |
| 57 | 380 | 0 | 45 | 2 | 0 | 52 | 1 | 12 | 0 | 68 | 1 |
| 58 | 1,000 | 0 | 36 | 1 | 0 | 59 | 3 | 5 | 0 | 62 | 0 |

*Data collected for SPSS represented the schools that responded to study, not the total number of schools in CTAE Southern Region*

APPENDIX J:

SPSS Pearson's Correlations for Demographic Data

*SPSS Pearson's Correlations for Student Demographic Data*

**Correlations**

|  |  | Enrollment | W | SWD | FR | EL | MIG |
|---|---|---|---|---|---|---|---|
| Enrollment | Pearson Correlation | 1 | -.053 | -.079 | -.440** | -.044 | -.132 |
|  | Sig. (2-tailed) |  | .693 | .555 | .001 | .742 | .322 |
|  | N | 58 | 58 | 58 | 58 | 58 | 58 |
| W | Pearson Correlation | -.053 | 1 | -.137 | -.411** | .044 | .076 |
|  | Sig. (2-tailed) | .693 |  | .306 | .001 | .745 | .573 |
|  | N | 58 | 58 | 58 | 58 | 58 | 58 |
| SWD | Pearson Correlation | -.079 | -.137 | 1 | .376** | .195 | .187 |
|  | Sig. (2-tailed) | .555 | .306 |  | .004 | .142 | .160 |
|  | N | 58 | 58 | 58 | 58 | 58 | 58 |
| FR | Pearson Correlation | -.440** | -.411** | .376** | 1 | .140 | .177 |
|  | Sig. (2-tailed) | .001 | .001 | .004 |  | .295 | .185 |
|  | N | 58 | 58 | 58 | 58 | 58 | 58 |
| EL | Pearson Correlation | -.044 | .044 | .195 | .140 | 1 | .507** |
|  | Sig. (2-tailed) | .742 | .745 | .142 | .295 |  | .000 |
|  | N | 58 | 58 | 58 | 58 | 58 | 58 |
| MIG | Pearson Correlation | -.132 | .076 | .187 | .177 | .507** | 1 |
|  | Sig. (2-tailed) | .322 | .573 | .160 | .185 | .000 |  |
|  | N | 58 | 58 | 58 | 58 | 58 | 58 |

**. Correlation is significant at the 0.01 level (2-tailed).

APPENDIX K:

Responses to Telephone Interview Questions

1. What methods were used by your CTAE instructors to prepare students for the EOPAs?

| Responses | Frequency |
|---|---|
| Review sessions with students before testing | 17 |
| Purchased and/or created guides for students | 9 |
| Build creditability - give reasons why assessment is important | 4 |
| Change mind set of students - don't Christmas tree answers | 3 |
| Use MOS Academy study guides | 1 |
| Pre-test areas that students were weak in review | 1 |
| Paired weaker students with stronger students in needed area | 1 |
| Mini-workshops with students | 1 |
| Promote CTAE credintals | 1 |
| Curriculum maps, blue prints, use crosswalks | 1 |
| Look at last year's detail reports for EOPA to know what to focus on for improvement | 1 |
| Have % of success part of department goals for data room and individual teacher goals | 1 |
| Administration must be on board - EOPA on system testing calendar | 1 |
| Software purchase for healthcare science to work on skills needed for EOPA | 1 |
| Purchase any aides that could help students be successful | 1 |
| Make sure students "see" the importance of EOPA | 1 |
| Make sure teachers are aware of the purpose of EOPA | 1 |
| Teachers used previous EOPA results to develop review tests that were given throughout the course | 1 |
| Review entire EOPA during final course in pathway | 1 |

2. What strategies/procedures do you believe helped the students to be so successful on the EOPAs?

| Response | Frequency |
| --- | --- |
| Students know what is expected | 5 |
| Honor cords at graduation to students who complete pathway and pass EOPA | 4 |
| Celebration activity for students who passed EOPA during the school day | 3 |
| Intense review sessions for students during school day | 3 |
| Teaching students the importance of EOPA credentials | 2 |
| Teachers work closely together for planning standards and review sessions | 1 |
| Students know that is they take two courses they will take the test in the third course | 1 |
| CTAE Pathway seal on diploma | 1 |
| Hire the right teachers for the right positions | 1 |
| Get teachers involved and onboard then the students will have the buy in | 1 |
| One-on-one counseling to students concerning pathways and EOPA | 1 |
| 8th grade orientation - teachers review pathways and EOPA process | 1 |
| Have pathway courses in sequence and test at end course | 1 |
| When students pass the MOS practice test with 90 or better they then take the EOPA in that area | 1 |

3. What barriers/problems do you believe hindered students from passing the EOPA?

| Responses | Frequency |
| --- | --- |
| EOPA and course standards do not align | 9 |
| Transfer students - teacher may not have covered all of the skills needed for EOPA | 2 |
| Remove the "stigma" of CTAE - change the mind-set of students/parents | 1 |
| EOPA is not as important at EOCT | 1 |
| Unlike EOCT - EOPA takes test at end of pathway not end of class | 1 |

4. What practices did you use to overcome them?

| Responses | Frequency |
| --- | --- |
| Review sessions | 7 |
| Treat like EOCT - teach standards needed for test - developed for each class | 3 |
| Use crosswalks for each department to make sure what is being tested is what is being taught | 1 |
| Changing thought process - Parents involved and realize the importance of EOPA | 1 |
| Teachers do review sessions - IF set goals are not met - must show lesson plans where informatiion was taught - MUST documentat that they worked with students | 1 |
| Have teachers take the test if available for them | 1 |
| Teachers must pick the appropriate test for their subject area | 1 |
| Teachers talking with other districts to share tips/strageties | 1 |
| Scheduling issues for students when pathway is not required | 1 |
| Teachers as advisors not knowing enough about CTAE to talk about pathways and EOPA | 1 |
| Keep all teachers informed of EOPA results for all departments | 1 |
| Data review sessions for teachers concerning EOPA results | 1 |

5. Do you have any recommendations for best practices to improve CTAE EOPA results?

| Responses | Frequency |
|---|---|
| Sharing best practices with others | 3 |
| Pay for 1st EOPA testing - retest is paid by students | 3 |
| Teachers work together within departments<br>Push MOS certification for teachers - so they will know how students feel | 1 |
| Data mining EOPA results to audit and improve future results - Follow through with teachers lessons and focus on weaknesses | 3 |
| Review sessions - Treat like EOCT - review (mini cram sessions) with students | 1 |
| Don't stop working toward goal of improvement | 1 |
| State DOE support | 1 |
| Communication with others sharing successes | 1 |
| Letting teachers decide on the evaluation to be used for EOPA | 1 |
| Let teachers teach what needs to be taught for EOPA (not necessarily the curriculum) | 1 |
| Using the 8th grade interest inventory as a guide into individual pathway for students | 1 |
| Effective teachers as advisors program | 1 |
| Change the mind-set of students/parents about CTAE EOPA | 1 |
| Retest if necessary | 1 |
| One company for EOPA (like EOCT) - difficult to schedule all tests with so many companies | 1 |
| Test as soon as 3rd course in pathway is complete | 1 |

APPENDIX L:

Transcription of Telephone Interviews

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<u>*School Code 7*</u>

Q     So let me ask you, what methods were used by your CTAE instructors to prepare students for the End of Pathway?

A     Well, about the only thing we did differently was we purchased study guides.

Q     From where?  From the vendors?

A     Yes, uh-huh (yes), we did.

Q     Okay.  And what money did you use to purchase that?  The Perkins, that extra grant thing?

A     I think it was just regular Perkins.  Joyce, I don't remember if it was regular Perkins or just local monies.  I don't remember.

Q     Okay.  That's okay.

A     And what else did we do?  My gosh.

Q     Did you have any review sessions or things?

A     I had some within my classes, but not -- yes, I did, within my classes.

Q     Within the last one or all of them?

A     Within the last one.  But I didn't do any after school, like sometimes we do for End of Course test.

Q     Right - right.

A     You know, cram sessions, remediation, whatever.

Q     Yes.

A     I didn't - I didn't.  And I don't know what the -- you know, in the classes I don't know what the other teachers might have done.  Oh - oh, one teacher I know prepared like a study guide, a self-prepared study guide, stuff from all of her classes.  The teacher in the family consumer science pathway, she went in and actually prepared like a teacher-prepared study guide that covered information from the entire pathway.

Q     Oh, okay.  That's good.

A     Yes, and I'm just trying to think of what else we did.

Q     Well, here, let me ask you the other questions and see if that triggers anything.

A     Okay.

Q     What strategies or procedures do you believe helped the students to be successful on the End of the Pathway Assessment?

A     Well, I think one strategy, I think all of us, you know, we stressed the importance of, you know, the credential they would earn if they passed these and we stressed the seriousness and that it wasn't just a freebie; that it was expensive, you know, to offer these assessments to the students and when we went in to take them that we wanted them to be very serious.  And I think that helped some.

Q     Okay.  Changing the mindset?

A        Yes, mindset.  You know, trying to get the attitude that this is -- you know, that we are -- you know, what we do here is very important and it's, you know, it's not called an End of Course test as the others are, but it's basically an End of Courses test, you know, when you complete the whole pathway.  Just try to be serious about it and to realize if you passed that you'll receive either a state, national credential.

Q        Okay.  All right.  And what barriers or problems do you believe hindered students from passing, the End-of-pathway assessment?

A        Well, I'm going to say this from the business computer science aspect.  I think that limited skills when they enter my pathway.  I think things that other schools teach at a middle school level that -- for example, and you know being an old business-ed teacher you're like this, mine come to me with no keyboarding skills.

Q        Exactly.

A        And it's hard - it's hard to do what you're supposed to do in the introduction course, you know, when you have to battle the weak...

Q        Exactly.

A        ...weak skills that they have.  I think that's a hindrance to me.  You know, I don't think you can progress students alone along as fast as you could if they came to you with the skill base that they need to begin with.

Q        Exactly.  I know.

A        That make sense?

Q        Yes, I know exactly what you're talking about.  Because it's not a require component anymore.

A        Exactly.  So they hunt and peck.

Q        Exactly.

A        They hunt and peck when you're trying to teach - when you're trying to teach MLA style research paper you've got students that are trying to type with two fingers.

Q        Exactly.

A        I mean you can word that to say any way you want to, but that's what I feel.

Q        I know what you're talking about.  What practices did you use to overcome these barriers?  So what have you done?  And you've mentioned it already on some of it that you purchased study guides, that you're doing review sessions.  Anything else you can think of? Do ya'll give out cords or anything?

A        We haven't - we haven't actually, you know.

Q        Do you go over the results of the End of Pathway with your teachers?

A        Well, we discuss it.  I'm not saying that we have a session where we sit down, but they all were aware, you know, when I pulled the report at the end of the year.

Q        Yes.

A        They were all given that information to show and then they all saw the PowerPoint that did that, showed where we were when we first started and actually the percent of increase that we've -- you know, because I was still feeling poorly about it until I pulled those, you know, the report that I sent in to Mamie and then I actually put it on the PowerPoint for the compliance review.

Q        Yes, ma'am.

A        I was feeling real bad about it until I could actually see, hey, the first year this is how many we had pass and now look where we are.

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Q        Exactly.

A        And, yes, they all have to say that we've had -- we've discussed it in our meetings, you know, when we have our CTAE department meetings and we've discussed it individually so, yes.  And I think we're all in the mindset that, you know, we've got to do ever better so.

Q        Okay.  All right.  Do you have any recommendations for best practices to improve CTAE End-of-pathway assessment results?

A        Maybe I would say maybe if you could get the students interested because I see results for our End of Course Test.  We meet after school remediation programs.  So if you could get - if you could get some type of after school...

Q        The mindset.

A        ...remediation programs set up where -- you know, with me after my students do the third course, you know, they may have kind of slacked off on, you know, fine tuning the skills that they learned in the first course.

Q        Exactly.

A        So if you could have some kind of program like that.  You know, I don't have one, but if you could that's just - that's just something I've been thinking about so.  I just see how here we make it available, so readily available, for the students that did not pass the End of Course Test.  If we could put some kind of program like that in place for students to remediate and, you know, before -- either remediate and take it again or, you know, because they said you can give it again if you spend so much time remediating.  That's just what I'm thinking.

Q        Yes.  So treat the End-of-pathway assessment like the EOCT?

A        Exactly.

Q        Okay.  All right.

A        And I'm already trying to do that by making them understand that, yes, you need this other to graduate, but this, you know, -- so trying to set the standard for it not being, oh, well, that's what they're doing in the vocational department.

Q        Exactly.

A        And it has utmost importance.  To me it does.

Q        Okay.  All right.  Thank you so much, sweetie.


*School Code 26*

Q        Okay.  The first question is what methods were used by your CTAE instructors to prepare students for the End of Pathway?

A        Methods?  Well, basically, I mean, they used their standards, but they also had to look at their, you know, the test itself that they were working on so that they could kind of correlate their standards, you know, that they're teaching in the classroom, the activities they're doing in the classroom, with what was going to be on the test also.  So they did try to work on some things that would actually bridge any gaps between -- because sometimes when you look at those assessments they're not identical or match up identical with the standards.  I think by redoing some of the standards we're going to see a clearer alignment.  But that's really kind of what they did to try to fill in any gaps that might show up on the test based on what the test standards or objectives are.

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Q        Okay.  What strategies or procedures do you believe helped the students to be so successful on the End of Pathway?

A        We did a lot of review for those.  So there is a built in review, like between January and March, of administrating the -- or whenever between January in time for that. So with us being on a seven-period day and they have all year to be working on it, especially getting ready for those assessments, they had some intense review-type sessions starting after Christmas and it could go to February until time of the test or January based on if we're going to go the MOS certification, say, in March then that way they have more than one opportunity to take it.  We may start practicing in January for that so they would mix some of the curriculum pieces or instructional pieces in with review times.

Q        Okay.  So you said that they could take it again.  So do you pay for them to take it the first time and then they take it again, I mean?

A        Certain test, for instance like the MOS certification tests you can remediate and retest them because if you buy a license you've got 500 tests.

Q        Okay.

A        So like we had a license and our license runs out tomorrow.  Well, it runs out Monday because we ordered it before.  But we actually, they can take the test more than one time if you remediate with them and you still have your proctor available.

Q        Okay.  All right.  But is that the only one that they retest or do they do it in others?

A        Actually, there's another test, I think the automotive test, which we haven't had a lot of people take that automotive, but they have a -- they actually allow you to have two tests.  A kid can take the test twice.  But there's certain areas where they allow for you to take the test more than once.

Q        Okay.  Very good.

A        The main one that we re-test is going to be the MOS certification test.

Q        Okay.  What barriers or problems do you believe have hindered students from passing the End of Pathway?

A        I think one of the things that I look at, and this is from a curriculum and instruction stand point, academics and electives, is that one of the -- it's a transition piece for us because one of the things is when you're looking in terms of electives, and now electives have these End-of-Pathway Assessments, you know, it kind of decreases the amount of flexibility I think you can have in preparing certain kids because in the end certain kids may not be ready because you've had to make those instructional adjustments.  Because these are not academic classes you know that they're challenged already and one of the things you're trying to do is support those academic classes and your elective classes by helping them get through the classes that are the most difficult, like math or science or whatever.  So I think that's just kind of that balance or that perception that when you go into the elective classes there is no - there is no qualifications you have to meet at the end or there's no assessment at the end.  Just getting kids to adapt to when you come in this class you are going to have standards and structured worked and there is going to be some type of requirement at the end of the course for you to get certification.

Q        So it's basically changing the mindset of the kids?

A        I think so.  I think it's the mindset of everybody involved.  That, you know, you had a little bit more flexibility but if we're really going to push people passing these

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End-of-Pathway Assessments you're almost taking something that was considered an elective and you're making it very much like an academic class.

Q        This is true.  I mean that's totally -- that's why I said changing the mindset.  I've heard that several, several times.

A        Right.  Definitely it is a mindset, but a change in how even the whole school views that, because now we've got to allow for some time, because we're not on block, we're on seven-period days so if my kids are taking End-of-Pathway Assessments if they started in their normal class that's an elective it may carry over into their academic class and we're having to make some concessions like we've never had to make before on campus and they're realizing that our CTAE teachers they have a responsibility and they have requirements to meet too and somebody's looking at their data now.

Q        Exactly - exactly.  For the CCRPI.

A        That's exactly right.  And they're looking and we're having to report that data.  So the accountability piece just everybody starting to know because it takes a while for -- you know, academic teachers think they're the only one accountable.  Well, that's not true.  You know, the CTAE teachers are now accountable for what kids are learning.

Q        Exactly - exactly.  Okay.  What practices have you used to overcome this part, the barriers and things?  And you said, you know, changing the mindset and the accountability piece and everybody realizing for CCRPI, you know, that the teachers are being held accountable.  And you have used that you do student reviews.

A        Uh-huh (yes).

Q        And do ya'll do anything else?  Do you give cords?  Do you reward the students or anything?

A        We do.  There's several things that we do.  First, just being proactive is a thing on the front end of it.  You know, even though guidance and having the counselors be aware.  For instance I created a sheet that has all the courses for the Pathways so when the kids go to select their Pathway and their graduation test I think is a big thing, and it really helps us get that word out that hey Pathways are important and we're going to have to select one and complete one when we're in high school.  So just having them know that and being able to share that information, being proactive in that sense about you've got to complete a Pathway, here are your choices, and when I look at the Pathway here's my course one, course two, course three.  And that gives them an idea, you know, I'm really interested in doing the audio-video technology.

Q        Okay.

A        And then also through guidance, letting the kids know that at the end of that you have a chance, you have an opportunity to take that industry certification test and come out with some type of credential, showing that you've really mastered something from a career standpoint.

Q        Do ya'll require a Pathway to graduate?

A        Well, you know, the ninth and tenth graders are really supposed to select a Pathway.

Q        Right.

A        We're not really requiring for them to complete it.

Q        Yes.

A        And we haven't put that, but we have had discussions about whether or not we would like to see that as a part of our graduation requirement locally.

Q        That's us.

A        We are truly encouraging everyone to stay in it.  We're not -- we're trying not to be real, real flexible with that unless there is like an issue.  In other words, some -- you know, but kids can change their Pathway.  And we're trying to get as many as possible.  And one of the things that -- and this is more from a proactive stance is to have those career technical teachers, I've discussed with them about identifying.  We spend time identifying prior to registration, you know, in the beginning of the year.  Go ahead and know.  Keep that list ongoing every year that says these people in the ninth grade took my first course.  I need to go ahead and tell them before they go register that they need to go ahead and continue into that second course and that's what they need to go in to register for in their elective.  So I've spent a good bit of time with them making suggestions and saying that, hey, you need to look at those kids that have a talent.  Now, you know, there's going to be some kids that, you know, marketing is just not for them or, you know, business is just not for them.  Not saying that they can't do it, but if you know that they might be more interested in something else then that's something you have to accept.  But if the majority of your kids, and you know who they are, are doing well in that first course encourage them to take that second course prior to registration.  And also just the teachers being aware and knowing who those people are.

Q        Exactly.

A        And that goes true for the second course.  So then you've got to look at your second course and say, hey, these kids in my second course I've identified them, but, guess what, they skipped over the first course.  It may be a scheduling thing.  We tried not to do that and our counselors are becoming more aware of that, but sometimes it just happens.  That that person sitting in my second course never had the first course.  And scheduling-wise when the counselors are doing that sometimes it's just a matter of finding a period or a class period they can get in to.

Q        Exactly.

A        Sometimes it has to do with somebody getting that third or that fourth science credit.  So sometimes we wind up with people in that third year of food science or whatever that did not have the first or second course because they've got to graduate.  They're not going to take the regular science credit so they're doing this for their science credit and they've got to graduate.  So those are some things that we're trying to really iron out, how to handle those issues.  It makes it a little bit easier with our healthcare courses because all three of those courses could be science courses.  So if you're -- you know, you can take the introductory course for your science credit and then, you know, that may be the only course you completed, but at least you're able to use it and be in the first course instead of a teacher having to spend time figuring out to differentiate because now this kid is in that third course and they didn't have the first two.

Q        Very good.  Yes.  I understand.

A        And on the other end of that.  Yes, you mentioned something about, and it may be because I got to talking about the front of end of it, you had mentioned something in your question at the end of your question about what happens after a kid is in class or it wouldn't be the proactive end of it.  Will you read that question again?

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Q       Well, this one, this question was just what practices did you use to overcome all those barriers and everything and I asked you if you did incentives, you know, if you did graduation cords or rewards or how did you get them...

A       We do seals on the diploma.  We also, once we know who all they are in the spring we'll do a little ceremony where we give them a certificate.  And they also are to receive some type of seal on their diploma.  So we do, the Pathway Completers do get a seal on their diploma, and it's just a sticker.  Just like we do honors, like kids who complete the honors.

Q       Exactly.

A       You know, honors science, that seal to recognize that.

Q       Okay.

A       It's actually on the diploma itself.

Q       Well, yes.  See.  Do ya'll do cords?

A       No, we don't do cords for Pathway completers.

Q       See, we don't either, but some other schools from talking people have done that.  Okay.  The last question is do you have any recommendation for best practices to improve CTAE End-of-pathway assessment results?

A       Well, I haven't been a CTAE director but this year, but I've also worked with them.  I've been here for curriculum instruction.  I've also had the opportunity to work with them a good bit.  I just really think that there's some things that I could tell you from my standpoint, from my staff that I've worked with.

Q       Exactly.

A       There's a lot of support from their administration in terms of professional development.  Actually providing them opportunities to work with their standards, building their unit and developing some activities that are really going to be relevant for the kids, maybe even get to that level of rigor they may need for that End-of-pathway assessment.

Q       Yes.

A       But I really think it's going to be in that curriculum instruction planning.  You know, even coming up with a right assessment that is going to help them get enough feedback formatively and summatively before they take that End-of-pathway assessment.  So I really think it has a lot to do with the planning of it and the implementation and the types of instruction in the classroom.  And naturally our CTAE teachers, if you really go look at them, they're been differentiating with kids forever.

Q       Exactly.

A       And you have one or two that need to polish it up some or they're not, you know, they're not on board with it, but usually that's where it's occurring mostly in your building is there, instead of academics.  The academic teachers seem to have harder time with that and it's because of that last setting.  When you have that last setting, you know, it's easy to be able to have different, test different groups engaged in different things.

Q       Right.  So really with the curriculum and the instruction and getting them all it's basically aligning the End-of-pathway assessment to what you're teaching in the classroom?

A       I think so.  I think that's going to be key to that and making sure that they have those relevant, engaging activities in the classroom that are geared to prepare them for the industry certification test or one of these.

Q        Exactly.  Well, darling, I thank you so much for helping me.

A        If I was some help, maybe, maybe not.

Q        You did.  You did wonderful.  Thank you so much.

*School Codes 36, 37, 34, 30*

Q        I was calling to see if I could ask you a few questions about your End-of-pathway assessment.

A        Okay.

Q        Okay.  You had four schools that greatly improved during the 3-year period of End-of-Pathway Assessments.

A        Okay.

Q        There's five questions that I would like to ask and you just tell me what you did.

A        Okay.

Q        Okay.  All right.  The first one is what methods were used by your CTA instructors to prepare students for your End-of-pathway assessment?

A        Okay.  I'm assuming you're talking about the business teachers -- I mean the business classes.

Q        Well, it was the overall your students did better so whatever you used. What types -- what did you use...

A        What we did?

Q        What you did to prepare your students for the test.

A        The students used a Microsoft Academy.

Q        Uh-huh (yes).

A        They used a Microsoft Academy -- I want to think of the -- instant study guides.

Q        Yes, ma'am.

A        The teachers used that.  I also purchased a -- and I will have to get that for you.  The teachers asked for another -- it was another guide that they stumbled upon and I can get you the name of it.  And the reason why the name doesn't come to me now because I have ten high schools that I'm responsible for.

Q        Yes, ma'am.

A        There was a -- they did study guides and they went over that with the kids and what they did was they pre-test the kids and then those areas that they were weak in they went over that area with the kids.

Q        Okay.  So they reviewed anything that the students were lacking in?

A        Right.  Another thing that we did here, like I say, for example, if you were very strong in tables, you know setting up tables.  You know, Excel was your thing...

Q        Yes, ma'am.

A        ...that you loved doing it.  What we did was we had the teachers to do mini workshops with the kids...

Q        Okay.

A        ...who were strong in that area.

Q        Okay.

A        Okay.  Like if you mastered mail merge we had teachers to go in and just did -- and work with them on mail merge until they got it.

Q        Okay.  So you kind of paired your weaker ones with your stronger ones?

A        Right.

Q        Okay.

A        Now at another school, and I'm thinking it was probably the early childhood...

Q        Okay.

A        ...program, and those teachers -- we have two teachers in the district that teach that, and those teachers worked closely together.

Q        Uh-huh (yes).

A        And they came up with guides with the kids, for the kids in the areas that they, as far as the standards.

Q        Okay.

A        And with that program they just basically taught the standards.  And there were a few sessions before the actual test.

Q        Okay.

A        And that was basically it with that school.

Q        All right.  So it helps though if your teachers, if they're teaching the same subject...

A        Right.

Q        ...to collaborate together and work teaching...

A        Right.  And even though the two teachers, because we don't have that many teachers that -- we only have two teachers that does the early childhood education program.

Q        Yes, ma'am.

A        They work very close together.

Q        Okay.  And these are the strategies or procedures that you believe helped the students to be so successful?

A        Right.

Q        Okay.  What barriers or problems do you believe have hindered your students from passing?

A        I think some of the barriers is that unlike the End of Course Tests...

Q        Uh-huh (yes).

A        ...at the end of course, with the End of Course Tests, you know, the kids take the course and then they take the test immediately after that class.

Q        Exactly.

A        So the material is still fresh.

Q        Yes, ma'am.

A        Okay.  With the End-of-pathway assessment, because we have so many that's after the third class...

Q        Exactly.

A        ...first of all you may not have the same -- the teacher that taught them the entrance class and the second class may not be the teacher that teaches them the third class. So in that third class that, that advanced class, you're going on the assumption that those kids covered certain skills.

Q       Yes, ma'am.

A       The skill sets.

Q       Yes, ma'am.

A       And that may not all together be true.  You know, we have kids that transfer in.  I mean and we have a high transfer in rate in our county.  I don't know about your county but we do.

Q       Yes, ma'am.

A       So we run in to that.  Students, because the End-of-pathway assessment is not tied to the class as far as if you don't pass the test you don't pass the course.

Q       Uh-huh (yes).

A       A lot of times the kids look at this "Lord, we've got another test."

Q       Exactly.

A       So I think that plays a role into it, but I think the biggest thing is that the teacher that teaches the first two courses may not be the teacher that teaches the third course.  So that teacher who's in that third course not only has to pick up something about the standards being taught that's in that particular class, but going back to review things taught in the other two classes.

Q       Okay.  And, well, that goes in to what practices do you believe could overcome them and that's teaching the same standards and possibly having it as an EOCT basically?

A       Right.  And I think even if it's -- and I know that's difficult because these are not state made tests.

Q       Yes.

A       These are the tests that we purchase from...

Q       Yes, ma'am.

A       ...different companies.  I think that - I think that the frameworks really help.

Q       Uh-huh (yes).

A       I just wish that there were frameworks developed for each class.

Q       Oh, yes.

A       So teachers will know, okay, I need to make sure I cover these frameworks to build upon so that those students, as they move on when they get to the third class, they would have covered all of the frameworks.

Q       Yes, ma'am - yes, ma'am.  Hallelujah.  I agree.  Okay.  And do you have -- well, that may tie into this number five.  Your recommendations for best practice to improve the results would be having the frameworks and tying it in and teaching the standards for every single section.

A       Right.  And basically the teachers working together.

Q       Yes, ma'am.

A       Now, one of the things that we do require of our teachers, especially under the Microsoft Academy, when they, you know, allow the teachers to become certified because I'm a firm believer if I can't get certified then how would I expect my student to become certified.

Q       Yes, ma'am.

A       So we push that in our district for our teachers to become, you know, Microsoft Academy certified.

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Q        Yes, ma'am.

A        Go ahead and take the test so you will know how the kid feels taking that test. You know, taking a test so when you're standing in front of those kids you have a sense of, you know, how they feel, but also you're able to tell them "I've took that same test. I know it's not easy. But if you listen to what I'm trying to teach you should be able to pass that test with no problem."

Q        Very good. Thank you so much for helping me with this, ma'am.

*School Code 16*

Q        This is the questions for a telephone interview because you had either -- well, like I said in the e-mail, you either had the highest actual percentage or you had positive change or you had the greatest difference so you made the list.

A        Okay.

Q        And so I just need to ask you just a few questions on basically what did you do.

A        Okay.

Q        Okay. So the first one is what methods were used by your CTAE instructors to prepare your students for the EOPA? What did ya'll do to prepare your students?

A        As far as throughout the semester or...

Q        Well, just what did you do -- what did your teachers do to get your kids ready for the End-of-pathway assessment?

A        I think that the main thing here is changing the mindset of the students as far as it just being just another test. I think that's half your battle. The teachers teach the curriculum but, you know, if the kids just want to go in there and just Christmas tree the test, you know, what good is it if they don't see the value in it. So building the credibility of the assessment I feel like is the first battle that the instructors need to do. Give some reasoning why this assessment is important and whether it be receiving some additional post-secondary credit, you know, articulating it with some of the other schools. You know, whether it be just earning the credentials so that they can make more money.

Q        Right.

A        You know, build it up - build it up. I think that's the -- that is one of the main things that we did here is changing the mindset. I seen it, you know, when I first started talking about it coming down the pipeline saying, okay, we can use this as an opportunity to promote CTAE and so that's what we've done and actually it's changed the entire mindset of the entire school in the district as far as the way everything is looked at CTAE-wise.

Q        Okay. Good.

A        So I think that's the main thing. Now, once you work on changing that, changing the mindset of the students and the faculty and community, working with the curriculum, and what we did is, and I know we've talked about it before, is taking the curriculum maps that the teachers are using in the class and then taking the blueprints that is given out by those individual testing agencies and then do a crosswalk. Let's see, okay, if 15-percent of the exam is spent on safety and we're only spending one week we may not be

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covering enough information to make sure that safety is covered for the assessment. So that's what we've done and just tried to -- and that's a continual thing. You don't...

Q    Exactly.

A    We haven't done that one year. Matter of fact, today me and our academic coach sat in the office today and that's what we did is we took last semester's End of Pathway scores. We're actually running late on it but because of everything that's happened with me it's forced us to be a little late with it. But what we've done is we took, for instance, not the exam. We went student by student and looked to see -- let me pull on real quick. And we've pulled -- for instance, it will tell you that this particular student scored a 58.8% on the technical skills. So what we did is we went through and we found the average of what area that the kids lacked the most as far as percent-wise.

Q    Right.

A    Where did they lack so that we can, in the classroom, be able to focus a little more? So what we did then is then we took the top three scores in the class and looked to see what they lacked in. And I was surprised with the data we found there because we found that the thing that was lacking the most was safety and if I'd have chosen I'd have safety would have been number one for the highest scoring people, but it was actually the lowest on all three of the - of the...

Q    Okay.

A    But anyway, that's what we do. We spend a good bit of time going back cross-referencing, looking at it. I've got a call in right now to Certiport talking with Wes trying to get some additional data to see where we compare and, you know, like...

Q    Do you prepare last year's students on what they use...

A    Yes. In fact, right now on my desk I've got the last three years' worth of data and that's what we're looking at. We're comparing to see, you know, what is a trend here that we need to do. Now, 80-percent of the kids that passed or not examined for AG scored above the national average that they do well with it, but it's those other kids that fall in those cracks we're trying to, you know, provide an additional safety net for them so that they can possibly score a little higher. We do that for each of the assessments.

Q    Good gracious.

A    I've talked to a lot of CGA directors and there's one guy, he's thought of real good, you know, as far as the directors go, and he told me one time, he said, "Mark, I ain't doing that." He said, "You know, I commend you for doing it," he said, "But I just ain't going to do it." But to me I think that if we can push these scores, especially with the CCRIP, you know, the more you can get that's passing that receives those industry recognized credentials you're going to get additional points.

Q    Exactly.

A    So, you know, that's what I do.

Q    Okay. And what strategies or procedures do you believe helped the students to be successful? And I really think that you just covered it all. That you're looking at the previous year's scores and informing your teachers so they know basically what to focus on for this coming year, right?

A    Exactly. Whenever the kids enter into the program their first and second course they know that at the end of that third course that they've got to take the assessment. Matter of fact, we have kids after they get their schedule they'll come in and say, "Hey, I've

got to take this third class because I've got to take my End-of-pathway assessment," because it's thought of that much.  I've seen kids whenever they would fail, like for instance last year one girl particularly I remember she left the room crying because she failed the assessment in the food service and I just, -- you know, it's just changing that mindset, not just the teachers but the community and all.

Q        Exactly - exactly.  Okay.  What barriers or problems do you believe has hindered your students from passing the End of Pathway?

A        I think one of the things is -- as far as barriers that they fail?  The reason why they fail?

Q        Well, or problems that you believe, barriers or hindrances why the students were not successful.  And I think basically it was, well like you've been saying, the mindset of what the kids, they just didn't...

A        But I think that's the biggest thing because you still have a couple of kids that just says, "Hey, I don't need this."  And if you go through - if you go through the list here and look at the ones that fail you can pick those kids out.

Q        Yes - yes.

A        They're just here to be here.  But I think eventually we can change all of that if we can, you know, change the stigma of the program and make it positive.

Q        Okay.  And the practices that you used to overcoming is everything you just listed, changing the mindset, looking at your students by student, so you answered number four, which was what practices did you use to overcome them? All right.  Now, so number five what recommendations do you have for best practices to improve CTAE EOPA results?  Like, okay, so what would you recommend to other directors to do?

A        I think by -- look at your data - look at your data. I've got a sticky note here on my desk to remind me to do what we did today and what I call it is audit and improve End of Pathway results.  That's the process that I did today is audit and improve End of Pathway results.  And it'll start with me and, of course, the academic people as well and then what we do is we, after we decipher the data we get with the teachers and show them what we found and just continue on and then just making sure that those teachers follow through with those improvements.  Another thing that I didn't mention a while ago that I feel like this is a key component in kids being successful, especially in the AG-mechanics way, is the -- hold on just a second.

Q        Okay.

A        I'm sorry.

Q        No problem - no problem.

A        But anyway, one of the things that we did is we added review sessions. What we do is we schedule it with the entire school basically in making sure that we don't conflict with the end of course test or anything else and then we actually schedule review sessions.  So like if we're testing on Wednesday what we'll do is we'll schedule a review session on Tuesday when we pull the kids out of class.  It's an all-day event.

Q        Okay.

A        And we schedule it and what will happen is, like for instance AG, they like to take the kids out and get a bite to eat and what we'll do is we'll provide substitutes for the teachers as for a development day and what they do is they take that blueprint and they go

over, just a little cram course, once again.  Because you look, for instance AG-mechanics, what happens there is a kid may their sophomore take AG-MEC 1.

Q        Exactly.

A        And then take Ag-MEC 2.  Well, then you've got several years' worth of data or time that's lagged there.  So what we do is we try to pull them all back together and say, Okay, let's do a cram session and we do that and we feel like that's one of the reasons why our kids are so successful in some of those assessments.

Q        Are the students just TL then?

A        Do what now?

Q        The students are counted TL for the day?

A        They are.  It's basically just put them in as a field trip.

Q        Okay.  All right.  So you do a mini cram session the day before the students test?

A        Exactly.  Now, for instance, in our business classes it's a little different because those are together and -- a maintenance man is laughing at me because I'm on the speaker phone because my cord has been messed up.  I'm sorry, Joyce.

Q        No, you're not bothering me.

A        We'll do a cram session and it has really, it's worked out good.  Now, for our business classes, because those are more in line, you had to take this class first and this one and this one, we don't necessarily have to do that per say but because we're trying to change the mindset on all of our paperwork that we put out we still put review session.  Even though those kids are in class we want everybody to know that this is just as equal as important so we'll do a cram session there, too.

Q        Okay.  So all of yours do, even your family consumer science and everybody does?

A        Everybody.

Q        Okay. That's awesome.

A        Everybody.

Q        That is a very good thing.  All right, sir.  Well, that's it.  That's all the questions.

A        Well, that'll work.  Well, we ain't perfect, but we like to work toward that anyway.

Q        Well, honey, you're on the way to improvement because you're one of the top 15 that improved their scores.  But think you so much, sir, and I hope things go well with your daddy.

A        Well, I appreciate it.  Thank you.

Q        Thank you, sir.

_School Code 23_

A        ...to get this accomplished.

Q        Okay.  So you gave them a reason?

A        Yes, a purpose for the -- they saw and understood what the purpose was.

Q        Okay.  All right.  What strategies or procedures do you believe helped the students to be successful in the End of Pathway?  What did you -- did you do anything?

A        First of all, I hired the right teachers.  I'm sorry, but it has to start with that.  So I had the right people doing the right thing.  As far as students, I'm going to have reiterate the first message.  In other words, if you get the teachers on board to say that "Look, this is going to be good for you" the students bought into it, too.

Q        Okay.  Well, that's true.

A        Yes.  And I guess we kept the same focus of, hey, we're convinced it's going to help you; they got convinced it was going to help them and they took it seriously.

Q        Okay.  All right.  What barriers or problems do you believe hindered students from passing the End of Pathway?

A        GPS and the standards of the test being a little un-cross walked.

Q        Exactly.  I've heard that several times.

A        Okay. So the GPS, the standards for the class and the standards for the test didn't line up real sharply.  So that's a barrier right there.

Q        Okay.  I've heard that several times.

A        I know we're straightening it out, but, I mean, this is data you've already collected so based on that data that's what hindered it.  That was a barrier.

Q        Okay.  All right.  What practices did you use to overcome these barriers?  Did your teachers start...

A        Take the test.  I mean they were aware of what the evaluation was.  The other thing I allowed...

Q        The teachers took the test?

A        In the cases where they could, you know where it was legal.  But the other thing I allowed them to do is pick which test they wanted.  In other words, I thought it was fair for the teachers to -- now, sometimes they didn't have a choice, but when they got a choice the teachers picked out what evaluation.  That works.

Q        Very good.  Yes, that helps.  All right.  Do you have any recommendations for best practices to improve the results?

A        I guess going back to letting teachers -- well, the message that makes sense to me is -- now you don't have to put this in your -- maybe it would be entertaining, but evaluation, and we've all been teachers, evaluation is kind of like underwear.  Okay?

Q        Yes.

A        Whether it's new or whether it's used it doesn't matter just as long as it's your own.

Q        Exactly.

A        And I'm not trying to be flip, but that really makes sense.  So to answer your question is to really let the teachers, you know, decide on what evaluation there was, to investigate, you know, the course that's going to lead it to them, to give them the freedom to teach what they knew needed to be taught.

Q        Okay.

A        Does that make sense?

Q        Exactly.

A        I kind of stepped back and say, "Hey, if we know what the purpose is, you know what the assessment is because you picked it out, then get them there and I'm just going to support you to get them there."  That's what we did.

Q        Exactly.  And it's like, you know, developing the SLOs.  The teachers...

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A       Oh, don't get me there, now.  Yes.

Q       Well, you know,...

A       Right.  If they're all anxious about it and spend a lot of time on it.  Joyce, we had SLOs when I was teaching third grade, you know.  We had a pre-assessment...

Q       If the teachers are teaching it.

A       That is not something seasonal.

Q       I know - I know.  And if teachers are teaching it and they're the ones doing it and they're the ones testing it it should be an easy breezy.

A       Well, you know what the problem I had?  They were calling me.  I was actually in Athens when they sent my slows.  But they were calling me up going, "I'm out of my classroom three days to do this."  That was their problem.

Q       Yes.

A       I have good teachers not wanting to leave their students.  This is just a thing.  But I'll tell you another thing off the record.  I didn't let my teachers waste their time on cross walking either.

Q       Please.

A       That was just ridiculous.  And the other thing, you know, I didn't do the testing when I didn't get paid for it.  I know I'm going to do it next time, but we weren't required to.  Now, don't get me wrong.

Q       Right.

A       If it was like - if it was like Microsoft IT and they had a certificate and if it's like CNA and they were going to get certificated of course I did.

Q       Exactly.

A       But until everything gets lined up and it's ready to go I didn't pull that trigger.  We were very selective that we're going to do automotive far as ASC is going to be certified.  I mean we're on a role now and I do believe in it and I'm glad I got some money to do it, Perkins Plus, to get them...

Q       Exactly.

A       ...done correctly for it, but based on what those questions you just asked me I don't plan on changing anything because, guess what, if it worked then it'll work now and we're better prepared for it.

Q       Yes.  Are you letting your students do pre and post on the End of Pathway?

A       Yes.  And then we kind of watch out about, you know, the ir-testing.

Q       Exactly.

A       Only because if they're here in IT you can re-test until the cows some home and we pay for it, but I can't pay for two CNAs.

Q       Yes.

A       I talked to teachers this morning about that.  We've got to be careful what we let because they're hearing "Well, I got to re-test there and I couldn't here."  It's a money thing, folks.  Okay.  Now, when I first did it and they wouldn't let you re-test I told parents that if they don't, you know, pass it the first time I'm not paying for it again.  Doggone, parents paid it again and told their young'uns to take it seriously.

Q       Very good - very good.

A       So that's -- I mean they -- I said I'm not -- they went in there and played around the first time.  They wanted -- well, you know what they want.  Oh, I guess this

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would be another strategy.  I put the accolades on their neck.  Joyce, that's the greatest thing since sliced bread.

Q        Oh, you do it at graduation?

A        Oh, yes.

Q        Oh, well, now, see that is something.

A        We give it to them -- well, on the seniors on their honor's night I put the around their neck then, but they can wear them when they walk.  And I put a seal on their diploma because, you know, they're taking the same diploma in and that's a different diploma from somebody not having any seal on it.  They will walk through fire for that.

Q        Okay.  And it's a seal for passing the Pathway and the test?

A        That's right.

Q        Okay.  So that is something.

A        That may be a strategy I forgot about, but that's a -- you may want to document that one.

Q        Yes, that is something.

A        I didn't know.  Oh, I had parents fighting for their cotton-picking ropes.

Q        Oh, well, that would be good - that would be good.  And who pays for the ropes though?  You do?

A        And I'm more stressed of what's on your diploma and what you give your employer.  No, they want to wear the different color ones.

Q        Who pays for the ropes?

A        I do.

Q        How do you get the money?

A        It ain't that much.

Q        Okay.

A        (unrecognized name) and I got together and we subcontracted.  That summer we got together and we kept comparing the different, you know, prices of it and local takes care of that.  And plus we buy in bulk because we know where we're going.  Now, don't get me wrong, with these new AG-134 new AG Pathway.

Q        Good gosh.

A        Doesn't that blow your mind?  That doesn't blow your mind.

Q        Mercy, honey.  Let me just tell you.  I haven't even started.

A        But you knew it was coming.  Didn't you know about that?

Q        Yes.

A        I sent it to Brenda.  She didn't know anything about it.  But I knew it was coming.  I talked to Chip.

Q        Exactly.

A        And I knew it was coming.  And he explained why.  We end up with 11 of them, by the way.  But we're not going to go tuttie-fruity crazy over that.  But to answer your question we buy in bulk because we know it's going to be coming.  The local system loves it. I mean they just like putting them over.  Now, here's what we're not doing, but I don't have any effect of it.  I had 12 band students come knock down my door to say "Where is our accolades?"

Q        Un-huh.

A        And I said, "That ain't my cup of tea and I'm so sorry."

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Q        There you go.

A        You know, I love band, too, but it was an un-huh and they're not doing it for fine arts and everything else.  So, you know, but that's where I get the ribbing for it.

Q        Well, they don't have an assessment.

A        Well, now they supposedly will with the SLOs, but, you know.

Q        Well, they're going to have it.

A        But maybe not.

Q        See, my thing is...

A        That is kind of a tricky question.  If you, because of CCPRI, what I'm saying is if you pass the three courses for the Pathway that makes you a Pathway Completer technically.

Q        Exactly.

A        But, you know, what's the difference when you get the Pathway Assessment taken.  That's tricky.

Q        Exactly - exactly.

A        You know, we'll cross that bridge when we get there.  But if you get three credits for it we're going to make -- we're going to put the seal and let you ride.  That's a local kind of thing.  If you don't then you just don't get that assessment, which goes on your record forever.  I mean that may be important for you.

Q        Thank you so much, Darling, for talking to me.

A        You're welcome.  Good luck on your study.

*School Code 18*

Q        The first question is what methods were used by your CTAE instructors to prepare students for their End-of-pathway assessment?  Have you given any yet this year?

A        Not yet.  We wait and give all of ours in the spring.  And normally they have materials, some of them have materials that they have been given by their program directors from the state that the use.  Some have materials that they purchase that they use.  And just whatever resources they have.  We also have increased learning time and so some of them are lucky enough that they have their kids that will be testing during that increased learning time that they're also reviewing with them.

Q        Okay.  So they have like a section during the day where they work on specific things?

A        Uh-huh (yes).

Q        Okay.  So they do review sessions.  Is the review sessions during the day or...

A        It's during school.  We're a (xx) school and as a result of that we have -- I think last we had to increase our day by 40 minutes and so that 40-minute block is used for reviewing.  So if the students don't have an End of Course Test or something else that they need to review for they're assigned to the CTE teacher to review for their End of Pathway exam.

Q        Okay.  All right.  So the second question is what strategies or procedures do you believe has helped your students be successful on the End-of-pathway assessment?

A        I think the biggest thing is just the teachers reviewing with them.  I know last year I was actually teaching marketing and as a part of my instruction we reviewed.  I

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would use question for bell-ringers that I thought would be helpful for the review. Also, like coming up to the actual exam, I would increase like blocks of time during class that we would review. And I think many of the teachers, you know, do the same thing as it gets closer and closer to the time for the exams they increase the amount of review that they devote to the exam.

       Q      Okay. That's very good. All right. The next one, what barriers or problems do you believe has hindered students from passing the End of Pathway?

       A      That's a tough one there. I think for some of them from what I understand from some of the program areas is like we had a problem I guess prior to the standards being revised that the tests were not necessarily aligning with what was being taught in class. And I'm not sure, you know, I know we changed the first course for most of the students that will be testing this year, but still students have been taught on those old standards. So I don't know, you know, if it will be that big of an impact this year or if the teachers are a little bit better prepared as to what to expect. We had our biggest problems in construction and our business courses and also culinary arts. That's where we -- in which culinary arts they changed the test this year so the students will be taking a different test.

       Q      Okay. Now, let me tell you, that's what I've heard the common thread is the End of Pathway did not align with the curriculum.

       A      Uh-huh (yes).

       Q      And that's been the biggest barrier that I've heard.

       A      Right.

       Q      What practices did you use to overcome these barriers? And it sounds like you're picking up any material you can to review.

       A      Uh-huh (yes).

       Q      Okay.

       A      Yes, we are. We're picking up whatever we can to review and I'm just encouraging the teachers the review as much as possible their course. As I said, this is my first year. I plan on maybe trying to put some more things in place for next year to even, you know, increase our success, but the biggest thing is just encouraging the teachers to take advantage of this 40-minute block. And most of them, the way we set up our testing our students test in that third course and so they have the students actually in class the semester that we'll be testing. So that's -- I think that will be a help also.

       Q      Yes. I think that helps. Are ya'll a block schedule?

       A      Yes, we're block schedule.

       Q      See, we are, too. Okay. The last one. Do you have any recommendations for best practices to improve CTAE End of Pathway results?

       A      Do I have any recommendations to increase it?

       Q      Yes. Well, any recommendations for best practices, things that people could do, anything that you can think of that you think would help improve CTAE results.

       A      Well, again referring back to when I was in the classroom, I went back, you know, they give you, at that time, marketing changed their test this year, but they gave us a print-out of the areas that show like where the students did well and where they were weak and I went back and looked at it as a goal. Like I think we didn't do well in economics and another area and so I focused the majority of my review on those areas that we did not do

well.  So I think the teachers have to take the time to go back and look at where the students did not do well and let that guide them in their review.

      Q      Very good.  That's very good.  Okay.  Well, Darling, you did awesome. That was it.

      A      All right.  Thank you.

      Q      Thank you so much, darling.

*School Code 25*

      Q      Well, this won't take but just a few minutes and I thank you for answering these questions for me.

      A      Well, I'll do my best.

      Q      Well, you'll be fine.  The first one is what methods were used by your CTAE instructors to prepare students for the End-of-pathway assessment?

      A      Followed the GPS care standards for whatever relates to the -- objectives for relating to the exam, you know.

      Q      All right.

      A      I mean I can give you 5,000 different teaching methods.  Everybody uses something different.

      Q      Okay.  Did your teachers -- the next question then is what strategies or procedures do you believe helped your students be so successful on the test?  Did you do review sessions or did...

      A      Well, what we've done is on most of them, like the Microsoft and the web page where we have design,...

      Q      Yes.

      A      ...classes we bought software where they had the practice test.

      Q      Okay.

      A      And we'd run them in the practice test.  So a teacher lets them take the practice test and when they get up to 90-percent or better we let them take the exam, their pathway exam.

      Q      Okay.

      A      That's how we prepare them for that.

      Q      For those tests.  What about in your other classrooms?

      A      Well, like the CNA, you know, they have to pass all their clinicals to be able to test out of there because that's a state test.

      Q      Right - right.  Okay.  Do you have AG?

      A      Yes.

      Q      Okay.  And do they -- they just give them practice stuff also?

      A      Well, you know, we're going through the test process on most of them now. You know, like on a pilot, piloting it, you know.  The AG, you know, then we got all these scores back, you know.  You know, we do it through NOCTI.  And they say it's to the state to give us a cutoff score of what's passing and what's not passing.  There hasn't anybody gave that to me yet so.  This is the first year we've done AG.

      Q      Okay.  So mostly yours is MOS and webpage and CNA?

      A      That and then we do the NA test for the automotives.

Q Okay.

A And then marketing they've got like three. I couldn't tell you what all of them are. I've got a testing coordinator. You'd probably be better off talking to her than me.

Q Oh, okay. Well, no, you're doing exactly right. Okay. What are some barriers or problems that you believe has hindered your students from passing the test?

A Well, on a lot of them, a lot of these End of Pathway tests, that's why we're just doing them a couple of times to see what it's all about, on the ones we haven't been doing because a lot of the stuff we teach doesn't relate to what's on the exam. You know, it's not correlating.

Q Uh-huh (yes).

A You know, it's getting better. You know, I'm starting to offer more, if we can get it, but, you know, two years ago when we were looking at this I said this is ridiculous because hardly anything was matching up. The only thing that was matching up to what we was teaching was the CNA.

Q Exactly. Okay.

A But now everybody is, you know, they're starting to find better tests and what meets our standards, yes.

Q Exactly. And that's a common thread that I've heard throughout talking to people is it's not aligned with necessarily the course. Okay. What practices do you, have you implemented or do you use to overcome some of the barriers and everything? Like the curriculum not aligned. So you're just getting more study guides?

A Yes. I mean, you know, and we are trying to give our teachers anything they need, you know.

Q Okay. All right.

A I know this don't sound correct, but we don't have barriers here. We're going to make it happen.

Q There you go. I understand that. And do you give cords or seals on the diplomas or cords for them to wear at graduation?

A No - no, we don't do that.

Q Okay. All right.

A We have so many graduates.

Q Oh, yes.

A We have honors night and then it would take 700 cords to give out at honors night.

Q Okay. All right. Do you have...

A I have a -- when I do give them a it's a little return tag, a nice return tag, like if you lose your phone. You know, I give everybody that completes a Pathway and an End of Path test one of these little cards and what it is it's like a sticker they can stick it on the back of the phone or on their computer or whatever. If they lose it, somebody finds it and they read that on there and they return it they can call that number and the UPS or FedEx comes and picks that up and returns it.

Q Okay. All right.

A But see when I give this card to them they have to go and activate it online, right.

Q Yes.

A        And when they activate it online I've got a series of questions I ask them about, you know, our school and how we do this, did you like that, you know, what are your future plans, are you going to college, going in the military, going straight to work.

Q        Oh, well, that's good.

A        And I can kind of track where our graduates are going.

Q        That is good.

A        So we've got about probably -- last year was the first year I did it and I got about -- out of all of them I gave out I got about a 70-percent response so that was pretty good, that activated them.

Q        That is good.  Okay.

A        It's a little sticker designed any way you want it.  Like we have *** County with a little *** and it says Pathway Completer.

Q        Oh, cool.  And CTAE pays for that?

A        Yes, I pay for that, CTAE.

Q        All right.  The last question.  Do you have any recommendation for best practices to improve CTAE End-of-pathway assessment results?

A        Yes.  The best practice is to find out how we can get more money to pay for them.

Q        There you go.  Okay.  All right.  Thank you so much for helping me do this.

A        Well, if there's something you need some more information on just give me a call back and I'll put my testing coordinator.  She's doing a great job.  We'll probably have about 250 Microsoft completers this year.

Q        Oh, my gracious.  It is something to have to set up all those tests, too.

A        We've got 60 CNAs.  Our engineering I think they're going to have about 20-something this year.

Q        Okay.  So you're just going by departments right now, just gradually getting into all of it?

A        Yes.  Like see this is the first year we've done AG.

Q        Okay.

A        Automotives - automotives, this is the first year we did automotives and they had six take the test and all six pass so that was good.

Q        That was very good.

A        Yes.  And the AG people I think we've had about eight take the test and I know four of them had to pass because they did real well, but we don't know what the cutoff score is and nobody's telling me so.

Q        Yes.

A        As far as I'm concerned they all passed.

Q        There you go.  Okay.  Well, thank -- go ahead.

A        We'll probably have about 450 End of Pathway test takers this year.

Q        Oh, my goodness.  And are you on block or you're on year long?

A        We're on block - block.

Q        Okay.  See, and that's what we're on is block and it's just hard to get a -- take a test in your senior year when you took the first course ninth grade.

A        Well, we test them when they're ready.

Q        Oh, okay.  So you don't wait?

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A	No, we ain't waiting.  That's stupid.  You know, you can't wait.  That's what I told Mandy and them.  I said, "We ain't waiting.  We're testing."  Because anybody can take a class as a freshman and a class the end of your sophomore year and the last one as a senior and you're supposed to remember all that stuff?

Q	Yes.

A	Ain't nobody going to remember that.

Q	I agree.  I think it should be like an EOCT.

A	Yes.  So like in Microsoft we've got freshmen in the Microsoft class the first one, whatever the name of it is now, they keep changing it.  Digital technology or whatever it is, used to be computer apps.  We might have half-way through that course actually start testing.

Q	Oh, my goodness.

A	And getting their Microsoft seal.

Q	Okay.  Well, that's good.

A	Yes.  So that gives them an opportunity to get all three certifications by the time they graduate.

Q	Exactly - exactly.

A	Yes.

Q	Okay.

A	Because see they're not a Pathway completer until they take those other classes, see.

Q	Exactly - exactly.  And that's what's counting for CCRPI.

A	Yes.  And the problem we're running in to is they'll be a group in a class, say if there's 20 kids in the class, 15 of them take the class half-way through the semester, or take the test, and five of them, or three or four of them say didn't pay they will keep going back and working on stuff they didn't pass and will continue following what they need to be doing in the class, you know.

Q	Yes.

A	So they can pass, you know.

Q	This is true.

A	So that's what -- yes.  But now, you know, we're monitoring more of, you know -- used to be 80.  If you got 80 with it you take the test, now we've moved that to 90.

Q	Oh, well, that's good.  And so that's a good indicator if they can pass the test or not?

A	Yes.  Anybody that usually gets 90 on the practice test most of the other tests will ace the real will.

Q	Okay.  Very good.  All right. Thank you so much, sir.  Thank you for answering.

A	Okay.  Thank you.

*School Code 54*

Q	I'm going to ask you a few questions if that's okay if you've got a second.

A	I do.

Q	Oh, bless your heart, darling.  Thank you so much for helping me with this.

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A        No problem.

Q        It won't take but just a minute and there's only five questions.  And the first one is what methods were used by your CTAE instructors to prepare students for End of Pathway?

A        Oh, gosh.  I probably would have -- I would probably have to -- I don't know if I can tell you that.  I don't know if you got my e-mail.  This is the first year I have been the CTAE director and I didn't have a lot of hands-on with it last year.  You're talking about our big increase that we had?

Q        Yes, ya'll had a good increase and I was just wondering, I mean, and too, that's what this is showing, is we took the highest five schools in each area and you had a huge increase in...

A        Yes, you're talking about -- are you just talking about -- I can tell you what we do now to help prepare, but I don't have any -- don't have all the results yet.

Q        Well, now, that's it. No - no - no, that's fine.  What are you doing now that for your teachers what are they doing to prepare your students to take it?

A        Well, one thing that they do is they do review sessions for some of those, especially the courses -- I'll give you an example, like forestry End-of-pathway assessment.  Some of the standards on there are taught in the very first course in the sequence and they may have had that in ninth grade, skipped a year or whatever and might not finish until eleventh or twelfth grade.  So what they've done there is they did some review sessions and when we've been able to do that is we have something called spare period here and it stands for students performing enrichment and remediation, but basically what that is is that's a two days a week we have a 30-minute block carved out where we do kids that need remediation in whatever it may be we have assigned a different teacher.  If it's, you know, if it's a biology class or if they still need to pass it towards the high school graduation test or if they're behind in classes and need to make up work, you know, or need tutoring in Spanish.  If we have a need, you know, we try to set that up and pretty much every teacher is involved in some way and then if they're not, they don't need, you know, remediation we have some enrichment classes.  I teach a wildlife class.  We have a chess club.  We have archery.  We have just different things, like the history of rock and roll, things like that going on.  Well, what our teachers have done is if they are going to be taking an End-of-pathway assessment they put them in spare period to review the old, you know, the old standards, the stuff they haven't been over in a while, in other words. That's one way that they've...

Q        Well, that's very good.  Very, very good.

A        Go ahead.

Q        I think that's very good that they do that.

A        Uh-huh (yes).

Q        Okay.  Anything else you can think of?

A        That's probably the biggest thing is just doing some review sessions with them and trying to, you know, go over with the kids what standards are expected because, you know, there's a lot of stuff we teach in the classes that are a little bit different, I guess, you know, than the End-of-pathway assessment.  So they try to make them aware too.  So I think maybe an increase in awareness.  I do know that's one thing that they -- because, you know, it wasn't as important a few years ago.

Q        Exactly.

A        As it is now and what they've -- since we've started focusing on it I think that's helped.  Plus being able to put them in those review sessions with the teacher to go over stuff they haven't seen in quite a while.

Q        Exactly.  Okay.  What strategies or procedures do you believe have helped the students to be successful on the End of Pathway?  And it sounds like your review sessions are really...

A        Yes, that.  That's it.  You know, good classroom teaching first and then we know that still people need help with these tests.  So that's probably the biggest thing is our review sessions.  And we're fortunate that we're able to do it because, you know, they're not -- a lot of them can't or won't come after school so we have that built in during the day so it's a perfect opportunity for them to get in there and get some help on it.

Q        Very good.  Okay.  What barriers or problems do you believe hindered students from passing the End of Pathway?

A        Again, probably even though we do the review it is, some of it is it's kind of spread out over years, you know, and they have trouble remembering everything from a couple of years back. That's probably one of our problems.  And then, too, just some of the standards that are on the End-of-pathway assessment, you know, whether we don't get them all covered...

Q        I know exactly what you're fixing to say.

A        You know, they don't match up completely to our state standards so that's, to me, a big, huge barrier.  I wish there was a better alignment between our state standards and what these End-of-Pathway Assessments call for.

Q        Well, let me just tell you, out of everybody I've talked to that's been the biggest problem is the End of Pathways do not align with the state standards.

A        Right.  And that's the -- I mean I hate to, you know...

Q        It's the truth.

A        Say anything negative about the state, the good ole' state, but that's really...

Q        It's the truth.

A        That is the biggest issue.

Q        Okay.  And what practices did you use to overcome them?  Did you give your teachers some professional development on helping to do this or did you buy them materials or...

A        Well, the teachers have, you know, they've got -- they've pulled some materials their self and they've tried to -- it goes back to the awareness - the awareness sessions with kids.  It's just letting them know these are the things that you'll be tested on it and trying to -- and trying to incorporate that into the reviews and trying to incorporate that in the class showing them what else is going to be tested, you know.  That's the biggest thing, but they just can't - they can't do it all.  But as far as, I don't know necessarily that we've bought anything special for that, but they have pulled materials off the various -- from the various testing agencies that we use.

Q        Right - right.

A        Tried to use that kind of stuff.

Q        Okay.  All right.  Do you have any recommendations for best practices to improve CTAE End of Pathway results?

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A        Well, I would recommend that people find a way to do these review sessions, but I think it's, you know, it's as important as any other test.  You know, like an End of Course Test if you've got -- if you've found a way in your school to review kids for the end of course test you can find a way to do it for the End-of-pathway assessment.  So I would definitely recommend that, especially for those students that have taken the full four years to get those three courses, or however many completed, you know.

Q        Exactly - exactly.

A        And also I recommend trying to do those -- I know some people test them all at one time in the year, but we try to do it by semester, you know, on block so as soon as they're done not to sit and wait from December until May.  We just go ahead and test as soon as they're done.  So if you're not doing that I'd recommend that as well.  I just think, you know, while it's still fresh, you know.

Q        Okay.  Thank you so much, sir.  And we're done.

*School Code 15*

Q        Well, could I ask you five little questions?  It won't even take ten minutes.

A        Okay.  Sure.

Q        All right.  The first one is what methods were used by your CTAE instructors to prepare your students for the End-of-Pathway Assessments?

A        Well now, you know, I'm not -- I wasn't here so I don't know.  Ms. *** was here.

Q        You don't know what they did last year?

A        Unt-huh (no).

Q        Okay.  All right.  What are you doing this year to get ready then?

A        What we are doing different we're going to test at the end of their second course instead of waiting and doing it one time a year.  We did some in the fall and some in the spring.  The teachers look at the standards and as far as like coaching the kids we haven't pulled them out for any review or anything like that, but just pretty much reviewing the test standards and testing them as soon as they finish that Pathway rather than waiting until March of the year.  Does that make sense?

Q        Yes, ma'am.  Are you on block?

A        Yes, we are.

Q        Okay.  See, that's what we do.  We do the same thing.  What Pathways or procedures do you believe will help your students to be so successful on the End of Pathway?  Testing at the end or?

A        Sure.  Testing.  First of all, we're working toward, for next year, we're working toward, and it's a work in progress, trying to have the courses in sequential order, not just have them take, you know, the business...

Q        Yes.  I know exactly what you're talking about.

A        ...communications first in all this, but that's not always the case so.

Q        I know.

A        Try and schedule -- trying to arrange our schedules so they take them sequentially.  Like I said, testing at the end of that class.  And this year we're going to test more so our scores are probably going to go down.  We're going to test everybody.

Q       Well, what, if you don't mind me asking, what...

A       Sure.

Q       ...test did ya'll test before?  What students were tested?

A       The ones the teachers hand selected.

Q       Oh, okay.  So they didn't test everybody in business.

A       Right.  They didn't test everyone who was a Pathway Completer.

Q       Okay.

A       They took the list that was prepared that these are Pathway completers and they said, "Yes, we'll test this one.  No, we won't test that one."

Q       Okay.  So they selected the...

A       Right.  So you could just put the students who tested were voluntary.

Q       Oh, there you go.  Okay.

A       That sounds better than saying the teachers hand selected, but they were pretty much -- testing was voluntary, not required.

Q       Oh, okay.  All right.  What barriers or problems do you believe hindered students from passing the End of Pathway?  That they just didn't get a chance or?

A       Well, I would say sometimes the End of Pathway didn't match the curriculum.

Q       I'm hearing that.  That's a common thread.

A       And truly they don't take it seriously because it doesn't count toward their grades.

Q       Okay.  They do not take it seriously.

A       Uh-huh (yes).

Q       Yes, that's exactly what I hear.

A       And here again, they're pulled out.  Like I say, it's not, even though you're supposed to have it on the testing calendar it's not always on the testing calendar.  It's just it's not considered -- it's not as important as an End of Course Test is to them.  They don't have personal buy-in in it I guess is the word to use.

Q       Okay.  What practices are you planning on using to overcome these barriers?

A       Okay.  Next year, I'm applying for the Perkins Plus Grant, which we did not have this year, to help pay for the test.  And we're going to try to pay for some substitutes and have the teachers come in and look at their data and sort of do some curriculum plotting to see, you know, are we teaching this and this and actually order the study guides from NOCTI because we didn't have those in place and maybe they're utilize those to help get the kids ready.

Q       Okay.  Very good.  NOCTI study skills, study guides.

A       Uh-huh (yes).  And any other -- really, we only give -- we give the -- we did - we did buy the Microsoft Office license this year so we can re-test if they fail.  So we may do some re-testing in Microsoft Office if they don't pass.

Q       Oh, okay.  All right.  And the last question is do you have any recommendations for best practices to improve CTAE End of Pathway results?

A       Well, I wish we could deal with one -- well, first of all, one company that understands high school kids.

Q       That would be so nice.

A        That would be, you know, if they would be more friendly toward high school students and require the same thing and if we didn't have to deal with 17 different companies and the computers didn't have to be reset for every test.

Q        Exactly.

A        I mean I feel like I'm whining and I don't mean to, but that's just -- it's just overwhelming.  The whole thing is overwhelming.

Q        I know exactly what you're talking about.

A        But if we could focus, just like with End of Course Test, or whatever they use.  They use – you know, whatever, like ACT or ACT and all those.  We need one company that has the same guidelines, the same, you know, the same link for the test, the same requirements.  And I know they say the local system chooses and that's true, but there's nothing that's consistent across the board.  Like there's not a healthcare offered through NOCTI.

Q        Right.  Exactly.  I know exactly what you -- I know exactly what you're talking about.  Okay.

A        To me if it was consistent and then, you know, if the state -- I don't know - I don't know.

Q        I know what you're saying though, baby, truly.

A        They could -- if the tests were correlated, and they should be to the new curriculum, but they're going to have to give us about five years to get all this worked out.

Q        Yes.  Okay.  Well, darling, thank you so much for answering these questions.

A        Uh-huh (yes).  You're welcome.

Q        Thank you.

_School Code 12_

Q        I thank you so much for letting me be able to call you and ask you these questions.

A        Oh, you're quite welcome.  I hope I can answer them for you.  If not, maybe I can find out so.

Q        Well, no, I'm sure you can tell me.  They're very simple and it won't take but just a few minutes.

A        Okay.

Q        All right.  The first one is what methods were used by the CTAE instructors to prepare students for the End-of-Pathway Assessments?

A        Okay.  There are a couple of things that we do.  The first thing is that we make the percentage of success a part of our department's goal, if that makes sense.  Basically in our data room where we have, you know, end of tests and graduation test and all those other things there are goals in the data room.  Over on our CTAE side we have, you know, percentage of Pathway Completers, you know, and increase of a certain amount per area.  We don't say a general -- you know, the department doesn't say five-percent increase because you've got some areas who only test three or four kids and then you've got some areas, like business and healthcare science, who test over 30 kids.

Q        Yes, ma'am.

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A        So that's what we do.  That's one of the things we do.  We make it a department goal and we make it an individual teacher goal.  The second thing we do is we had to get administration on board.  We put the testing dates on our system testing calendar so that parents and students and other teachers would realize that it is just as important as the CRCT and all these other tests.

Q        Yes, ma'am.

A        Another thing we do is we, about three years ago we decided that we would give honor cords for graduation to those students who complete a Pathway and complete that Pathway Assessment.  That gave us a big boost in students wanting to pass because the first thing they would ask is, you know, "What do I get for this," and those kinds of things.  So we do the honor cord.  We pay for the first testing, of course, out of Perkins' money and those kids who want to test again they pay for it.

Q        Okay.  So you allow your kids to take it the second time if they need to?

A        Right.  We allow them to re-test if they want.

Q        Okay.

A        Another thing we do is we have what we call a -- what do we call it?  Picnic on the patio and for all of the students who -- because the kids love going on our patio that's attached to our lunchroom.

Q        Yes, ma'am.

A        So we close the patio that day and only those Pathway students who passed come out and we have pizza and drinks for them.  And that way...

Q        Like a celebration party.

A        It makes them feel special and the kids are looking in the lunchroom looking out wondering, "Well, why we can't go out there" kind of thing.

Q        Okay.

A        I'm trying to think of what else we do.  The teachers, we've encouraged them to, for example, the healthcare science teacher there is software that she uses that - that she uses a couple of times a week for them to kind of just work on, you know, some of the skills that she knows would be on that test.  I was at the meeting in Athens and they talked about the marketing one.  I'm thinking about getting that test because they said it's in line to the standards also and -- what's her name -- Linda pretty much said that she could almost guarantee that those students who work on that could pass the test.  So any aides that the teachers feel like -- we do the geometrics with the business teachers.  But anything at all we can get that the kids feel like would help them then that's what we try to do.

Q        Okay.

A        But I think the biggest thing is to let them see the importance of it.  Make the parents aware.  Make the teachers and the other people in the building aware that this is a good thing that they're doing if they can pass and be able to credential so.

Q        Okay.  So that kind of -- what strategies and procedures do you believe helped the students to be successful?  Because that's the second question.  And so yours is basically let them see the importance of it and their reward at the end of it.

A        Right, for them doing their best.

Q        Okay.  All right.  Importance and rewards.  All right.  What barriers have you faced or problems do you believe hindered students from passing the End-of-pathway assessment?

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A        Well, you know, the teachers complained , for example, the public safety teacher, the metals teacher, they complained several years ago that the actual test that they were giving with not properly aligned with the curriculum.

Q        Exactly.

A        So they had low test scores and from what I can understand public safety still has some issues.  I know that metals and construction now they're going with the modules and that kind of thing which ties to the curriculum, but they're supposed to be working.  But I would say that is one of the biggest problems is when the national test doesn't fit or tie in with the curriculum that they have to teach.

Q        Okay.  I agree with you on that.  Okay.  And what practices did you use to overcome all of this stuff?  And it sounds like changing the thought process about the importance of it.

A        Oh, yes.  No doubt about it.  Making, you know, parents aware of what was going on because when we very first did this the parents had no idea what End of Pathway testing was.  You know, most of the people in the building had no idea what it was because we kind of did it in a vacuum.  Now that it's on the, you know, testing calendar they realize it's important.  We, you know, we make an announcement that morning, no all calls, those kind of things, and you know, it lets them know that it is a priority just like some of the other testing that they have.

Q        And do you do review sessions or anything?

A        Yes, the teachers do, you know, they put that in their lesson plans and they do review sessions.  And at the end of the year when we do our annual if they haven't met their goals as far as percentage passing then, you know, we talk about that and they have to show me with their lesson plans where they were -- you know, what they did and, you know, those kinds of things.  And if they've done what they were supposed to do and they still don't have that pass rate or that percentage increase then I don't have an issue with us, you know, just trying to look at other ways, but if they can't, you know, document that they spent time working with these kids to get them ready for this assessment then I do have an issue and, you know, we have to talk about that.

Q        Okay.  Very good.  Okay.  So they must document that they worked with students?

A        Yes.

Q        Okay.  All right.  And one last question.  Do you have any recommendations for best practices to improve CTAE End-of-pathway assessment results?

A        I think that sharing best practices is great.  You know, the session that we had in Athens was very good.  I took notes.  And I think another thing is that even though one of our highest percentage rates as far as passing is concerned is our healthcare science, but we don't stop, you know, with we've got one of the highest pass rates in the state because as long as some child didn't pass it then we're going to keep on trying to figure out what we can do to make us have or continue to have a hundred percent.  I think last year we had a hundred, but, you know.

Q        Yes.

A        It just has to be a priority.  We have to share successes, how did we do it.  And I think that the state department, which I think they do a good job with just being there and supporting us in our efforts.  We had some issues when we first were testing.  I think it

was the skills test.  I can't remember, but we were on the phone with Mammie and she was one the phone with the vender and, you know, the vendor is saying it's nothing wrong and that kind of thing and then Mammie started realizing that it's not just hindering *** County, there's somebody here and there's somebody there.  And she took some attention to it and they realized there were some issues with it.  So I think communication in anything is the best thing so that we can, you know, kind of share because if we don't know, you know, if I don't know that you had the same problem and you don't know that I had the same problem or I'm doing something good down here in South Georgia and somebody else is doing something good in North Georgia why not share those kinds of things so that we can kind of, you know, make sure that everybody -- they're my kids, but they're not my kids because all of the kids' successes help us, you know, as a system, you know, to make sure that these kids are ready to do what they need to do.

        Q       Exactly.  Okay, baby.  Well, I think that was it.

        A       Okay.  Very good.

        Q       Very painless - very painless.

        A       Have fun on this beautiful day.

        Q       Thank you so much for helping me.

*School Code 50*

        Q       Okay.  It's only five questions.  It won't take but maybe just ten minutes at the longest.

        A       Okay.  That's fine.

        Q       Okay.  Thank you.  Okay.  The first question is what methods were used by your CTA instructors to prepare your students for the End of Pathway?

        A       All right.  The most common way was on each exam the year that the student was going to be a completer in that particular course they would go back, you know, and pull questions that would have been -- or they would include questions on each exam from like the first and second course and kind of as a review.  You understand what I'm talking about?

        Q       Yes.  So you would just pull and do like a re-test for those students?

        A       Right.

        Q       If they had them in class or did you pull them out?

        A       No, when they would give an exam they would just -- like if they gave an exam the second week of school they would begin to include those questions.

        Q       Okay.  So if they had them in that last course of that Pathway they would...

        A       Right.

        Q       ...include previous questions in all of their exams?

        A       Exams, yes.

        Q       Oh, okay.  All right.  Very good.  Okay.  What strategies or procedures do you believe helped the students to be successful on the End of Pathway?  What did ya'll do besides reviewing like you were saying where the teachers would include previous questions?

        A       Uh-huh (yes).

        Q       Anything else that they would do?  I mean because...

        A       Yes, they would have an intense review.  We would pull the students in

maybe -- we have a break every day and they would pull those students in during that break time and kind of have a more intense review.

Q        Okay.  And did you just do it the week before or...

A        Yes.  Well, you know, a week or two, whatever was working with our, you know, schedule and other things going on at school.

Q        Oh, okay.

A        I just kind of left that up to the instructors, you know, when they could -- when they would try to call them in during break.

Q        Okay.

A        But definitely, you know, within a two-week period of the exam.

Q        Yes, ma'am.  Okay.  What barriers or problems do you believe hindered students from passing the End of Pathway?

A        Well, let me think.  Probably, you know, I use those national exams and I just feel like sometimes the questions might be worded or, you know, information might be on the exam because of it being a national exam that they might be questioned on some competencies that they might not have covered.

Q        Exactly.  See, I'm hearing that a lot.

A        Yes.

Q        That the test and -- the curriculum and the test were not necessarily aligned.

A        Right.  Exactly.  Right.  You know, in fact, Ag thought that they was such a problem that they developed their own exam.

Q        Exactly.

A        So, yes, but I think it's still, you know, a problem in other areas.

Q        Okay.  All right.  For the next one, what practices did you use to overcome this?  And obviously your main thing was that your teachers started pulling from previous courses to review in class.

A        Right.

Q        And then they pulled them for the one or two weeks before they were to test.

A        Right.

Q        Anything else that you did?

A        Well, not really.  Just other than, you know, in talking with other directors or coordinators, you know, and even my instructors talking with other, you know, their peers.  Like I had an instructor, we went to a workshop just a couple of weeks ago and she does our family food science nutrition and she happened to be talking to some other food science nutrition instructors and they recommended a test that was shorter and that they thought really aligned more with what we teach than maybe some of the other exams that had been given.  So I guess you could say, you know, just the instructors themselves, you know, talking with other...

Q        Talking with other peers?

A        With their peers, you know, and seeing what had been successful, you know, with those instructors.

Q        Do you give cords or seals on your diploma?

A        We give cords.

Q        You do cords?

A        Uh-huh (yes).

Q        Who pays for the cords?

A        I pay for them out of QVE.

Q        Okay.  And it's for if they pass the Pathway and the test?

A        No, they just get a -- they get a cord if they're a Pathway completer.

Q        Okay.  All right.

A        And you have to -- I mean, you know, when they take the test if they pass the test if there's a certificate that can be printed at that time we print those certificates and, you know, give them to the students, you know, to show they've met the competencies and passed - passed that national exams.

Q        Yes, ma'am.

A        But as far as the cords they only have to just be a completer, pass the three courses.

Q        Okay.  Do you have any recommendations for best practices to improve End of Pathway results?  Anything you want to...

A        You know, I was at the conference in Athens, you know, and they gave us that whole list or, you know, some other directors shared some of the things that they had been doing at their schools, you know, but, you know, I just don't know if I really have one because -- I mean it would be great if you could pull them in on like a Saturday, you know, and, you know, do an intense review, but the problem would be would be getting the students, you know, to buy into it to see.  I guess my thing would be just to get the students to buy into the End-of-pathway assessment as being an important exam, you know, and to actually show that they're going to have those credentials and that, you know -- because now like with the CNA students, you know, they take that really -- you know, they take their test and, you know, they're actually certified CNAs.

Q        Yes - yes.

A        You know, and they can go out and get -- you know, I don't know how valid those certificates are showing they've passed their national certified exam and what way it really carries...

Q        Exactly.

A        ...as far as getting jobs and, you know, those type things.

Q        Very good - very good.  I understand.  Okay, darling.  Well, thank you so much for answering my questions.

A        You're welcome.


*School Code 45*

Q        There's five questions that I need to ask you, and I'll try not to take too much of your time.

A        All right.

Q        The first one is what methods were used by your CTAE instructors to prepare students for the End of Pathway?

A        The teachers doing a review session, but at the same time they provide incentives to the student for passing.

Q        Like what?

A        Say for example, if they have so many kids pass then they will have a pizza party or something.

Q        Okay.  All right.  I see.

A        They do incentives like that.  Also, we do give cords at graduation for kids that passed End-of-Pathway Assessments.

Q        Who pays for those?

A        We do.  We each have -- each of our two high schools has school stores and we use the money from the school stores to order the cords.

Q        Okay.  All right.  That's good.  And what -- your review sessions, are they during the day or after school or what?

A        No, they're all during the day.

Q        Okay.  Are they during class time or do they like, the kids are like TL or something?

A        No, during class time.

Q        Okay.  All right.

A        And usually some of the non -- and most of the times they're in the third course any way when they're doing it so it's a review for the whole class.

Q        Yes.  See, that's what we try to do, too.

A        I'll tell you another tip.  I'm not sure what you've got in your other questions.  But also we have a lot -- our graduation rule, when we switched over to doing -- we did the Pathway back years.  We've always required them to have three classes of the same CTAE Pathway.

Q        So yours is required?

A        Yes.  And I know there are some other systems out there that it may -- they didn't do that, and I'm not sure what ya'll did in ***.

Q        We did not.

A        But they didn't have to have all three of the same.  But ever since we've moved to the Pathways we've always had you had to have three of a Pathway.  Now, we produce a lot more Pathway completers that are eligible that take the Pathway exam.

Q        Very good.  No, we do not require it.  I've tried, but I don't know.  It may -- the CCRPI may end up being the trial.

A        Yes, exactly right.

Q        Okay.  What strategies or procedures do you believe helped the students be so successful on the End of Pathways Assessments?

A        I would say the teachers knowing what the content descriptors and what was on the test, all in review material that's available.

Q        Okay.  Did you buy...

A        If the teachers understand what's on the test it's easier for them to do their review.

Q        Did you get study guides or things?

A        Yes, if there are.  Some of those they haven't been able to find study guides for, I mean besides the very general, you know.

Q        Exactly.

A        Like some from NOCTI, NOCTI has very -- they don't usually produce study guides, and if we have them then we'll order them.

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Q        Okay.  All right.  What barriers or problems do you believe hindered students from passing the End of Pathway?

A        I would say students that struggled in the course work of the three courses. That they would struggle with completing the End of Pathway.  And I'll be honest with you, I don't know if you want to put this in there, but some of those End-of-Pathway Assessments, some are easier than others.

Q        Well, yes, they are.

A        I guess the level of difficulty, too, would prevent some of them from passing.

Q        Well, and a lot of people thought the barrier -- I mean and this is not trying to put words in your mouth, but that the assessments didn't necessarily line up with the curriculum.

A        Exactly, right, yes.

Q        Okay.  All right.

A        Yes.  I can actually give you an example.  Like for example, the Microsoft exams.  We had a high passing -- we've just started our testing and we've got a high passing rate for the PowerPoint but then the Word they're struggling on.

Q        See, that's exactly right.  And we did the Word and this year we're going to do PowerPoint to try to get somebody to pass the thing.

A        Yes.  In the PowerPoint there I've got a high passing rate on that one right now.

Q        Well, that's what we're going to...

A        So far it's been 60 kids.

Q        Well, that's good.  That is very good.  Okay.  What practices did you use to overcome all of your barriers and everything?  So you just had review sessions and...

A        Yes, and providing the incentives and cords and being recognized at graduation.  Not graduation.  We have an awards night and that's when the seniors get recognized for completing their Pathway.

Q        Yes, see, that's what ours are.  They get them that night and wear them for graduation.

A        Yes.

Q        Okay.  Do you have any recommendations for best practices to improve the CTAE End of Pathway results?

A        Align the standards to the course to the End-of-pathway assessment.

Q        All right.  Yes, that would help so much.

A        Because they are, there are a lot of those that are not really in synch.

Q        Exactly.

A        But that's probably when they proposed them and your standards. Hopefully your teachers are taking into consideration what those -- the standards for the exams so when they're redesigning the -- if they're redesigning the curriculum they're basing some of it on the End-of-pathway assessment.

Q        I truly hope that's what it's really based on.  I do.  I haven't had the time to look at all of those new standards.

A        No.  We had 23 Pathways we offer.

Q        Oh, my mercy.  Bless your heart.

A		Yes.  So 23 Pathways times three courses, yes, I have my work cut out for me.

Q		Do you have a test coordinator?

A		Yes, we do have test coordinators, but our -- we have work-based learning coordinators at two high schools and they're responsible for the testing.

Q		I would love to do that here.  I have to get all those test things together.  It is a pain in the keester.

A		It is, and all those companies, and now we're at the point too where we've done it so long we make sure we get those special ed kids tested.

Q		Oh, my gosh.  That's a whole nother...

A		And now what you find, like they have both of them -- I know they're all stressed out.  That's what I told the superintendent.  I was like, oh, my gosh.  I was like for every one of these testing companies you've got a special ed kit.  I was like now they're having to get the special ed teacher to sign a form, return the form back and then seeing if they can get the combinations from them.

Q		Oh, my gosh.  I haven't started that yet, but I've got to start it in the next couple of weeks getting ours ready because we're going to test around the first week of May for our people.

A		And see, that's what I told my two work-based learning coordinators.  I said, "Listen, we can't wait on" -- like some systems offer a scheduling of testing, like you do it a certain week.  Oh, gosh.  With 23 Pathways.  We just started and we'll be testing out through May.

Q		Oh, my gosh.  Do you pre-post...

A		To get all these kids.

Q		Do you pre-post or you just post?

A		You mean -- what do you mean by that?

Q		Do you take -- do you let the kids take a pre-test and then take a test?

A		No, we just only post-test them.

Q		That's all we do, too.  I can't afford the other.

A		Oh, no.  Unt-huh (no).  Yes, we couldn't either.  No, not at this rate.

Q		All right, Darling.  Well, thank you so much.  I tried to make it...

A		If you have any other things, just let me know.  I don't mind helping you.

Q		Thank you.

APPENDIX M:

Institutional Review Board (IRB) Exemption Report

**Institutional Review Board (IRB)**
*for the Protection of Human Research Participants*

## PROTOCOL EXEMPTION REPORT

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**PROTOCOL NUMBER:**   IRB- 02972-2013          **INVESTIGATOR:**   Joyce Davis

**PROJECT TITLE:**   A Study of Best Practices for South Georgia Career, Technical, and Agriculture Education End of Pathway Assessments

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**INSTITUTIONAL REVIEW BOARD DETERMINATION:**

This research protocol is **exempt** from Institutional Review Board oversight under Exemption Category(ies) 1 & 4.  You may begin your study immediately.  If the nature of the research project changes such that exemption criteria may no longer apply, please consult with the IRB Administrator (irb@valdosta.edu) before continuing your research.

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**ADDITIONAL COMMENTS/SUGGESTIONS:**

Although not a requirement for exemption, the following suggestions are offered by the IRB Administrator to enhance the protection of participants and/or strengthen the research proposal:

**Please remember to restate the informed consent prior to the phone interviews.**

☐   If this box is checked, please submit any documents you revise to the IRB Administrator at irb@valdosta.edu to ensure an updated record of your exemption.

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*Elizabeth W. Olphie*          *10/4/13*      ***Thank you for submitting an IRB application.***

Elizabeth W. Olphie, IRB Administrator          Date
                                                *Please direct questions to irb@valdosta.edu or 229-259-5045.*

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*Revised:  12.13.12*