Perceptions regarding the Michigan merit curriculum reform policy and its impact on CTE and dual enrollment in a southeastern Michigan high school

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PERCEPTIONS REGARDING THE MICHIGAN MERIT CURRICULUM REFORM POLICY AND ITS IMPACT ON CTE AND DUAL ENROLLMENT IN A SOUTHEASTERN MICHIGAN HIGH SCHOOL

by

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DEDICATION

This project is dedicated to all of my relatives, ancestors, and friends who are no longer here on this earth but have inspired and continue to inspire me.

“We are the children of those who chose to survive”

I never doubted my ability to survive. Look at where I come from. I won’t limit myself to my parents and grandparents. I am going to go all the way back to the root. In my parents’ family line is the genius of those who were born into a barren land and built pyramids. In the oasis of my mind is the consciousness of those who charted the stars, kept time by the sun, and planted by the moon. In the center of my being is the strength of those who planted the crops, toiled in the fields, and banqueted on what others discarded. In the light of my heart is the love of those who bore the children who were sold away only to be hung from a tree. In the cells of my bloodstream is the memory of those who weathered the voyage, stood on the blocks, found their way through the forest and took their case to the Supreme Court. With all that going for me – there is nothing to worry about! - Nana Poussaint in Daughters of the Dust

“I move in the power of a mighty past” - Adapted from Acts of Faith by Iyanla Vanzant

“I walk on the shoulders of giants”!
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ABSTRACT

Michigan joined Arkansas, Indiana, Massachusetts, Oregon, and Rhode Island in the high school reform effort. The Michigan Merit Curriculum (MMC), mandated in 2006, contained a new set of statewide graduation requirements. This qualitative case study used focus group interviews to examine the perceptions of students, teachers, parents, and key administrators in a southeastern Michigan high school about the effects of the MMC on students’ performances and outcomes as they relate to Career and Technical Education (CTE) and dual enrollment, and about problems that emerged from the MMC. Five themes emerged from the data: Transparency and Communication for Dual Enrollment, Loss of CTE and Elective Programs, Acceptance of the Status Quo, Need for Flexibility, and Support for CTE, Jobs, and Careers. Recommendations for practice included expanding and promoting CTE courses and program offerings for students in the high school and offering (MMC) academic credit in CTE classes. Other recommendations included expansion of articulated and escrowed college credit offered in CTE courses, communicating the criteria to all stakeholders, expanding the advanced-placement course offerings to students, and expanding and promoting interventions currently offered to students to help them meet the MMC requirements. Other recommendations included making the MMC more functional and applicable for a wider range of students, tracking and following all cohorts of MMC graduates, and assembling or reconvening groups to make adjustments to the MMC policy. Further, schools and school districts need to follow the rules related to dual enrollment as stated in the Postsecondary Enrollment Options Act of 1996 and to offer an incentive similar to the Promise Scholarship to students who meet the MMC requirements.
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Chapter 1: Introduction

One of the most widely implemented educational reform efforts of the last few decades has been for states to increase high school graduation requirements, thereby mandating curriculum. The current school climate hinders student achievement/scores on high-stakes state tests, national assessments (such as the ACT), benchmark tests, and school district developed common assessments. The No Child Left Behind Act (NCLB) of 2001 addresses issues in core academic areas such as math, language arts, science, and social studies. Elective programs such as Career and Technical Education (CTE) were not included in the NCLB legislation. Notwithstanding, both elective courses found in CTE and core academic programs are impacted by NCLB legislation, which expects integration of academics into students’ classes or programs (Gunderson, 2006).

The State of Michigan’s response to NCLB was to approve Education YES! in 2003. Education YES! is an accreditation system that provides standards and benchmarks for all elementary, middle, and high schools (i.e., a measurement for determining exemplary schools) to help them to achieve adequate yearly progress (AYP). In another development in the high school reform effort, on April 20, 2006, Governor Jennifer Granholm signed the Michigan Merit Curriculum (MMC; House Bill 5606 and Senate Bill 1124, Public Acts 123 and 124 of 2006) into law. The MMC, which contained a new set of statewide graduation requirements, also established benchmarks and standards for all Michigan public high schools. High school reform must proceed in order to (a) improve achievement, (b) reduce achievement gaps, and (c) better prepare students for postsecondary and career success (Bartik & Hollenbeck, 2006).
Prior to the bills that Governor Granholm signed in the fall of 2005, Superintendent of Public Instruction Michael Flanagan assembled a research group to examine high school education standards in Michigan. The group was composed of people from a variety of backgrounds, including school administrators, special educators, and representatives from the Department of Education. They met from September through November and reviewed policies enacted in several states.

After reviewing the experiences and research of several states such as Arkansas, Indiana, Massachusetts, Oregon, and Rhode Island, the group developed a set of recommendations for statewide graduation requirements in Michigan, which were similar to those enacted in many other states. In this study, any references to the MMC refer to the Michigan law that mandated that all secondary students should complete a minimum of 18 credits in core academic areas to earn a diploma. The MMC standards include:

- Four credits of Math (including algebra I, geometry, and algebra II, or an integrated sequence of its content, a fourth year of mathematics taken in the senior year of high school)
- Four credits of English language arts
- Three credits of science (including biology, chemistry, or physics)
- Three credits of social science (including U.S. history, geography, world history, economics, and civics)
- One credit of physical education and health
- One credit of visual, performing, and applied arts (Legislative Council, 2007, Michigan Department of Education, 2008a).
The 41-member Cherry Commission, formed in March of 2004 and chaired by Lieutenant Governor John Cherry, spent six months considering the entire education pipeline from the preparation students receive in high school to their completion of a postsecondary degree. The commission discussed ways to double the number of people with postsecondary degrees and credentials in the state. They also worked on closely aligning higher education and economic growth in the state.

The impact of the Cherry Commission on high school reform, educational attainment, and the Michigan economy is yet to be determined. The full impact will be realized when the first class (the class of 2011) has graduated and moved on to their postsecondary endeavors. The success of the Commission and its recommendations involves more than a strong executive branch or a committed legislature. We might learn from the history how the state responds collectively to higher education transformation.

One of the major ways in which the Cherry Commission differs from previous commissions is in the value that it gave to individual communities and how the communities respond to statewide needs and mandates.

Another widely implemented high school reform effort is dual enrollment programs, which offer high school students opportunities to take college-level courses on high school or college campuses. These programs offer challenging curriculum, exposure to a college campus, and an opportunity to earn college credits while still in high school. Dual enrollment has historically targeted high-achieving high school students. According to Golann and Hughes (2008), educators and policy-makers view dual enrollment as a strategy to help a broader range of students make the transition from high school to college. While dual enrollment is growing, students who struggle academically or who
are at risk of dropping out may also realize significant benefits from dual enrollment (Golann & Hughes, 2008).

Dual enrollment provides a range of positive benefits:

- Increasing the academic rigor of high school curriculum
- Helping low-performing students meet high academic standards
- Providing more academic opportunities and electives
- Reducing high school dropout rates and increasing student aspirations
- Improving student acclimation to college life
- Reducing the cost of college by enabling students to earn college credit that is tuition free (Karp, Calcagno, Hughes, Jeong, & Bailey, 2007).

The following seven of the nineteen recommendations of the Cherry Commission relate to the range of positive benefits of dual enrollment mentioned earlier:

- Make higher education universal
- Set high expectations for high school students through rigorous standards and curriculum
- Implement new strategies for high school success
- Equip educators and administrators to support high expectations – high school path
- Expand opportunities for “Early College” achievement
- Align postsecondary education with economic needs and opportunities (Caine & Barnett, 2005).

Michigan’s 11th Annual Governor’s Education Summit focused on “Rigor, Relevance, and Relationships: Reinventing High Schools.” At the summit, Governor
Granholm stated, “We will not have the economic growth and prosperity we want in this state unless we move methodically and relentlessly to give Michigan the best educated workforce in the nation” (State News Service, 2006). Governor Granholm’s agenda was to keep the recommendations of the Cherry Commission by doubling the number of college graduates by 2016 (State News Service, 2006). Dual enrollment is a way to help achieve this goal by giving students early experiences in taking college courses.

**Statement of the Problem**

The mandated MMC also determined the scores that students must achieve on the MME, the PLAN, and the ACT tests to enroll in college classes while in high school. The revised cut scores allowed students who traditionally elected to take CTE courses be able to dual enroll in college courses. Therefore, the MMC could narrow CTE course-taking possibilities and potentially impact CTE career pathways for students. As students in the class of 2011 and beyond face the challenges of the MMC and make plans for life beyond high school, they have some very difficult decisions to make. They have to meet the core requirements of the MMC, which in many cases limits their options for course selection into CTE classes. If students opt to dual enroll in classes, this can further limit their opportunities to take traditional CTE courses. Policy-makers have challenged the value of many of the traditional CTE courses. They feel that many of the traditional CTE courses do not lead to a four-year college degree. Perceptions of students, faculty members, and other stakeholders regarding the MMC reform policy are important. This qualitative study used focus groups to determine if stakeholder groups’ perceptions will garner information regarding how the MMC affects student performance and outcomes related to CTE and dual enrollment. Focus groups were also used to look at perceptions of these
stakeholder groups to determine the extent to which the MMC is perceived to influence
dual enrollment or CTE course taking. In this era of performance-based funding and
increasing accountability, educational administrators must ensure that their schools
achieve AYP and follow federal and state mandates; ensure that high schools students
meet the requirements of the MMC; and also encourage them to take advantage of having
a college experience while in high school (dual enrollment), as suggested by Governor
Granholm. Therefore, the following supports the need to determine the importance of
various stakeholder groups’ perceptions regarding the MMC.

CTE programs continue to support educational, technical, and occupational
standards. Standards-based reform movements in the past have always complemented
CTE. The reauthorization of the Carl D. Perkins Vocational and Technical Education Act
of 1990 required states to develop a standards system and to include performance
measures. At that time, however, compliance with the law was limited to state reports on
the progress of the development of such an accountability system. Even so, by 1993, all
50 states reported that they already had or were developing performance measures and
standards for secondary CTE. However, the standards varied greatly from state to state
(McCaslin & Headley, 1993). The federal government has a long history of supporting
CTE; the most recent evidence of governmental support is in the reauthorization of the
Carl D. Perkins Act (2006). There is a private and public good of having a highly skilled
and competent workforce, as it is necessary for strong state and federal economic stability
as well as global competitiveness in a knowledge economy. “As the Cherry Commission
and an abundance of studies have pointed out, there is a strong relationship between
economic growth and postsecondary educational attainment” (Bartik & Hollenbeck, 2006, p. 2).

The continuing economic decline in the states, as demonstrated by the magnitude of job and income loss and subsequent deficit growth in the State of Michigan’s budget, prompted the establishment of the Cherry Commission in 2004. The recessions in Michigan in the early 1980s and 2000s hit manufacturing very hard. The differences today, as opposed to the 1980s, are that the crisis is structural rather than cyclical. The economy is in a predictable pattern of unemployment rates. The industrial economy’s foundation has changed. This systematic and cultural change and the change in the states’ educational attainment have moved Michigan from a manufacturing economy to a knowledge economy.

Michigan has experienced a major decline in high-paying manufacturing jobs and a significant decline in adjusted per capita income. According to the Cherry Commission (2004), Michigan’s wages, from 1969 to 2001, lost 11.78% against the national average – and as a comparison, Massachusetts gained 18.06% in the same time; in economic growth, Michigan ranks 47th in the nation.

Michigan has the highest unemployment rate in the United States. The unemployment rate in Michigan as of April 2010 was 14.0% (Bureau of Labor Statistics, 2010). The current environment in Michigan has not supported college education for all. This is quickly changing, as the focus in Michigan is on high-skill, high-wage, and high-demand jobs. Michigan’s Hot 50 job list of tomorrow’s high-demand, high-wage careers through 2016 includes careers such as Engineering Managers, Construction Managers, Education Administrators (Postsecondary), Management Analysts, Medical and Health
Service Managers, Personal Financial Advisors, and so on. All of the above-mentioned careers require a bachelors’ degree or higher. Governor Granholm, quoted in the Michigan Hot 50 materials, stated, “There is a direct link between learning and earning. That is why it is critical that everyone pursue education after high school” (Bureau of Labor Market Information and Strategies Initiatives, 2010, Introduction section, para.1).

The policy-makers and citizens have said that free trade, taxes, and even cold winters are the reasons for the economic and manufacturing downturn in Michigan. These reasons may have contributed in part, but educational attainment has been a factor. According to the Cherry Commission (2004), Michigan is ranked 34th in the nation for the proportion of residents aged 25 years and older who have bachelor’s degrees or higher – 21.8%. This is below the national average of 24.4 % and considerably below the top state of Massachusetts with 33.2%. A state’s single most significant resource to attract business to locate and remain in the state is having a talent pool from which to draw.

Strong colleges and universities are very important resources. Many vibrant and diverse postsecondary intuitions are located in Michigan. These institutions excel in research and in educating students. Despite the large number of graduates from these institutions, Michigan is not reaping the full benefits. The students are migrating out, and the state is losing many of its talented and educated young people.

Governor Rick Snyder, the first certified public accountant elected Governor in Michigan, recently spoke to accounting students at Wayne State University in Detroit. Snyder asked the students to stay in Michigan after they graduate (Bell, 2010). The Governor was responding to forecasts by Moody’s bond rating agency, which ranked
Michigan 50th out of 53 states in job growth (Bell, 2010). Snyder also suggested that Michiganders would have to change their attitudes and raise their expectations.

Job growth specific to cities, according to Forbes (2010), listed the following cities in the top five for projected job growth: Cedar Rapids, Iowa; Huntsville, Alabama; McAllen, Texas; Brownsville, Texas; and Mobile, Alabama. All of the aforementioned cites ranked above 100 on the Forbes list in educational attainment – share of population over age 25 with bachelor’s degrees or higher, except for Huntsville, Alabama, listed as 37. Detroit ranked 177 in educational attainment (Forbes, 2010).

Forbes (2010) Best Place for Business and Careers listed Boulder, Colorado; Bethesda, Maryland; Ann Arbor, Michigan; Cambridge, Massachusetts; and San Francisco, California as ranked in the top five for educational attainment.

In addition, the Cherry Commission (2004) stated that Michigan lost 11,663 (aged 22-29) bachelor degreed citizens in the same time period that California’s population gained 140,588, with a U. S. average state gain of 6,929. These figures are staggering, and they imply that if Michigan increases the higher education attainment of its residents, it may reclaim its place of relevance in today’s interconnected global economy.

**Purpose of the Study**

The perceived problems outlined in this study illustrate that while new educational reform policies often have quality of intent, it is difficult to ascertain how the MMC coupled with dual enrollment have affected CTE. Given the need for highly skilled, high-demand laborers, one unexplored area for inquiry is to examine the perceptions of CTE and dual enrollment students, teachers, administrators, and parents
regarding the MMC reform policy and its impact on CTE and dual enrollment in a southeastern Michigan high school.

The world of work is in a constant state of change. The workplace in the United States requires postsecondary experiences, higher-order thinking, and problem-solving skills. Jobs that allow today’s men and women to be able to support their families also require strong technical, academic, soft skills, and an education beyond high school. Oakes and Saunders (2000) stated that shifts in the labor market have led more and more educators and policy-makers to believe that high school should blur the distinction between college preparation and workforce preparation, and prepare all students for both college and career. This approach would increase both the rigor and relevance of the high school curriculum and also boost academic achievement, keep students from dropping out of school, and improve workforce outcomes.

Gray (2002) noted that the federally defined mission of CTE changed with the Perkins Act of 1990. This act includes preparing students for the transition to postsecondary pre-baccalaureate technical education. This program called Tech Prep, calls for high school intergraded CTE to be closely articulated with postsecondary technical education programs. Longitudinal data suggested that more than half of the integrated CTE concentrators go on to college and that more than half enroll in two-year associate degree programs (Gray, 2002).

The purpose of this research study was to explore student, faculty, and administrator perceptions of the influence of the MMC on student performance and outcomes (e.g., course selection, perceptions of rigor, and postsecondary credit earned). The study also examined the degree to which the MMC as an educational reform policy
influences CTE and dual enrollment in a southeastern Michigan high school. Additionally, the study examined problems and politics that emerged from the MMC as the solution to high school reform and increased rigor in a southeastern Michigan high school.

**Significance of the Study**

This study of the perceptions of CTE and dual enrollment students, teachers, administrators, and parents regarding the MMC reform policy and its impact on CTE and dual enrollment in a southeastern Michigan high school is important for several reasons. One reason is to develop new knowledge about the perceptions of students, teachers, parents, and administrators regarding how the MMC affects student performance and outcomes as it relates to CTE and dual enrollment. Another important reason for conducting this research is to determine the extent to which the MMC is perceived to influence dual enrollment or CTE course-taking. Increased high school graduation requirements can affect the enrollment in CTE programs (Lazaros & Rogers, 2006). Concern is being voiced by CTE stakeholders that mandated graduation requirements and revised rules for dual enrollment based on the MMC may result in a domino effect (Lazaros & Rogers, 2006). The domino effect begins with the loss of students, teachers, and classes, and ends with a loss of programs.

This study adds to the limited research on the MMC, CTE, and dual enrollment in Michigan. This study extends current research beyond existing knowledge and provides a deeper, more through level of understanding of the topics. It provides insights into how the various stakeholder groups feel about the MMC, CTE, and dual enrollment. In addition, this research study not only serves to inform a larger community of researchers,
but fills a gap and a void in existing literature. Another reason for conducting this research is to give voice to stakeholders generally not heard. This study broadens perspectives in the educational community and enables CTE and dual enrollment students, parents, and administrators to add their views and ideas to an existing body of knowledge. The research study extends current research by considering the perceptions of CTE and dual enrollment stakeholders in a southeastern Michigan high school regarding the MMC reform policy and its impact on CTE and dual enrollment. The research provides a deeper understanding of the problems associated with requiring and implementing the MMC from key stakeholders in the educational process.

A final reason for conducting this research study is to inform educational practice. This information may lead to the validation of current practice or the need to change current practice. The study informs and can improve current practice by providing practitioners with ideas, insights, and solutions from the shareholder’s perspective. This study can also provide important information to stimulate conversations as policy-makers’ debate high school reform.

Policy-makers at all levels, school board members, and school administrators can use the results of this study to help examine various perceptions so that they can better represent their constituents before debating or taking a position about high school reform and its impact on CTE and dual enrollment. Johnson and Immerwahr (1994) believe that those involved in school reform must have a clear grasp of what the public wants from its schools and how those expectations match what it perceives to be happening. It is important for education and education policy-makers to assess, collect, and analyze data regarding educational stakeholders’ perceptions and attitudes toward high schools in
order to develop reform initiatives that the public and various educational stakeholders can accept and embrace.

**Research Questions**

In order to determine the impact of the Michigan high school graduation requirements, the MMC, and dual enrollment on CTE in a southeastern Michigan high school, this research addresses the following questions:

1. How do students, teachers, parents, and administrators perceive how the MMC influences student performance and outcomes (e.g., course selection, increased graduation requirements, perceptions of rigor and postsecondary credit earned)?

2. How do students, teachers, parents, and administrators perceive the effect of the MMC on dual enrollment or CTE course-taking?

3. What are the perceptions among the stakeholder groups regarding how the MMC and dual enrollment have affected CTE?

4. What is the perception of the MMC as a viable educational reform policy to strengthen high school graduation requirements?

**Definition of Terms**

The following are definitions of terms used in this study:

*Bounded Case Study* – a form of qualitative research employed to gain in-depth understanding of the situation and meaning for those involved. Like other qualitative studies, this type of case study is interested in process, context, and discovery generated from single units or a bounded system (Merriam, 1998).

*Career and Technical Education (CTE)* – high school curriculum that includes courses in arts and communication, business, management, marketing, and technology,
engineering/manufacturing and industrial technology, health sciences, human services, and natural resources, and agriscience.

*Career and Technical Education Student (CTE student)* – students enrolled in at least one state-approved CTE program.

*Core Education Courses* – academic subject areas: mathematics, science, language arts, and social studies.

*Dual Enrollment* – educational programs that award credit at the secondary and the postsecondary levels.

*Dual Enrollment Student* – students who have taken at least one dual enrollment class.

*High School Content Expectations* – standards in all of the MMC core content areas of mathematics, science, language arts, and social studies developed after implementation of the MMC.

*High-Wage High-Demand Jobs* – Michigan’s Hot 50 job list (2010) of tomorrow’s high-demand, high-wage careers through 2016 includes engineering managers, construction managers, education administrators (postsecondary), management analysts, medical and health service managers, and so on.

*Michigan Merit Curriculum (MMC)* – graduation requirements mandated in the State of Michigan beginning with all high school graduates in the class of 2011 and beyond – four credits of math, four credits of language arts, three credits of science, and three credits of social science, one credit of health and physical education, and one credit of visual, applied, and performing and applied arts.

*Michigan Merit Examination (MME)* – a replacement for the Michigan Educational Assessment Program (MEAP) test, a minimum-competency test for high school students.
The MME is required for the class of 2008 and beyond. The MME is used to measure “adequate yearly progress” as required under the No Child Left Behind Act. Part of the MME is the ACT. In addition, there are Michigan-specific sections, including social studies, writing, and the ACT Work Keys tests.

*Multiple Streams Framework* – a structure for policy-making that occurs when the political stream, problem stream, and the solution stream converge at the appropriate time (Kingdon, 2010).

*Political Stream* – key participants in decision arenas of the legislature or executive branch propose, debate, enact, or resist specific policy initiatives (Kingdon, 2010).

*Problem Stream* – various issues compete for attention and priority on policymaker’s agendas (Kingdon, 2010).

*Qualitative Research/Methodology* – one of many forms of qualitative research. All methods help to explain social phenomena. The key philosophical assumption in all types of qualitative research relies on the belief that reality is constructed by individual links with their social world (Merriam, 1998).

*Tech Prep* – curriculum that engages high school students in a four-year or six-year plan to gain the competencies required for a technical career.

*Solution Stream* – policy stream in which various, often competing, policy ideas for addressing particular problems are floated, tested, discussed, revised, combined, and packaged (Kingdon, 2010).

*State Approved CTE Classes/Programs* – High-demand, high-skill, and high-wage occupations as identified by the State of Michigan.
Window of Opportunity – a time when policy-making occurs as the result of the problem stream and the political stream convening at the proper time (Kingdon, 2010).

Delimitations

Delimitations are used to narrow the scope of a research project (Creswell, 2005). This study is limited to CTE teachers, CTE students, dual enrollment students, and administrators in a large southeastern Michigan high school. While this study may give us valuable perceptions that may assist us in understanding the impact of the MMC and dual enrollment, it should not be generalized beyond the scope of this project. The large southeastern high school (and the two other comprehensive high schools in the district) has some of the largest dual enrollment numbers in the State of Michigan. The high school and the district have a unique arrangement with the local community college that accounts for the large number of students who are dual enrolled.

The study focused on CTE teachers, CTE students, dual enrollment students, and administrators’ perceptions of whether the MMC and dual enrollment has had an impact on CTE. Perceptions of the participants regarding problems and politics that have developed due to the MMC mandate also were investigated.

Limitations

One limitation of the study is the inability to generalize beyond the scope of this project. The scope of this study is focused on CTE teachers, students, parents, and key administrators working in a large southeastern Michigan high school. The school has state-approved CTE programs, with the instructors and a local director who are responsible for meeting all state and federal program requirements. The results of this study may not be generalized to general education programs.
Another limitation of the study is that the data were not translated across the focus groups. A silo-coding scheme was used within each focus group. Open coding was used to look at the data for initial themes. I organized the data that were contained in each focus group independent of the other focus groups.

Hierarchical, non-hierarchical axial coding, and inductive coding from the focus group transcripts would likely have led to different findings. These themes and categories would cut across focus group responses that could have produced a cumulative qualitative type of cookbook.

This qualitative study illustrated that the codes that were used are descriptive. However, the descriptive codes illustrated a coherent analysis that moves beyond simply summarizing what the respondents said during the focus group interviews.

Creswell (2005) noted that qualitative studies could be limited by a small sample. This study’s sample provide a unique demographic mix of the school in terms of race, religion, ethnicity, and immigrant status, along with a cross-section of stakeholders, including parents, students, teachers, and administrators. While the themes captured here may indicate perceptions elsewhere, they cannot be considered a representation of the view of CTE instructors, CTE students, dual enrollment students, parents, and administrators throughout the State of Michigan.

Summary and Organization of Study

The dissertation is organized into five chapters. The background of the study, central aims of the study, statement of the problem, significance of the study, research questions, and definition of terms, delimitations, and limitations compose the first chapter. The relevant literature frames the second chapter, which provides a historical
overview of vocational education and describes linkages between secondary and postsecondary education. In addition, integration of general education and technical education as well as participation rates and demographic trends in vocational education are described, providing a context for education. The MMC realignment of secondary curriculum and use of dual enrollment to address industry needs for highly skilled workers is also discussed in Chapter 2. Information in the third chapter builds on the conceptual underpinnings of the study, drawing upon the multiple streams framework as a guiding conceptual underpinning, and communicates the utility of qualitative methods for this study. Results of the data analysis are shown in the fourth chapter followed by possibilities, implications for future research and recommendations for practice in Chapter 5.

This study sought to explore the perceptions of students, teachers, parents, and key administrators in a southeastern Michigan high school about how the MMC affects students’ performances and outcomes as they relate to CTE and dual enrollment. The Michigan economy is in a current state of high unemployment. The state’s economic foundation has shifted from a manufacturing economy to a knowledge economy. This major shift in Michigan led to the MMC mandate and the focus on all students pursuing education beyond high school.

Literature related to the history of career and technical education is presented in Chapter 2. The historical review summarizes the changes in governmental mandates and the philosophy that reformed CTE programs over the past century. The review includes research on CTE legislative reforms, an overview of the multiple streams framework, linkages between secondary and postsecondary education, integration of academics,
vocational education, and populations that historically participated in vocational
education. Trends and demographics of contemporary CTE students, dual enrolment, and
the MMC, and secondary curriculum are discussed in Chapter 2.
Chapter 2: Review of the Literature

The literature concerning the MMC, dual enrollment, vocational education, and/or CTE is investigated in this chapter. The chapter is separated into categories, which include the historical review and an overview of the Multiple Streams Framework. Attention in portions of the chapter is given to linkages between secondary and postsecondary education, integration of academics and vocational education, and populations that historically participated in vocational education. Demographics and trends of contemporary CTE students, dual enrollment, and the MMC and secondary curriculum conclude the remaining portions of the chapter.

Historical Overview of Vocational Education

To understand the contemporary context of Career Technical Education, a review of the origins of vocational education is required. As an emerging trend in American secondary curriculum, vocational education programs in the United States were established to provide occupational skills, which would assist students in making the transition from school to work by preparing them for entry-level jobs.

The 1990 Perkins Act defined vocational education as organized educational programs offering a sequence of courses directly related to the preparation of individuals in paid or unpaid employment in current or emerging occupations requiring education and training other than a baccalaureate or advanced degree (Perkins Act, 1990).
Early context. The roots of vocational education have developed from the apprenticeship system. According to McCaslin and Parks (2002), the apprenticeship system in Colonial America provided young men opportunities to participate in “full time work, on-the-job training, and additional instruction in the theory of the craft” (p. 12). The setting in the apprenticeship system was one-on-one interaction between the student and the mentor. The teacher’s role was to instruct his or her students so that they could obtain mastery of the skill.

This system was effective in passing on a trade or skill from one generation to the next, along with sharing cultural roots (Finch, 1999). The apprenticeship model was not efficient as the United States expanded. The factory system fueled a need for experienced workers. This growth in manufacturing led to changes in the apprenticeship system. Changes in the apprenticeship system can be attributed to the need to teach large groups of students, the centralization of industry, overcrowding of trades, low wages, and the development of public schools (Gordon, 1999).

Due to changes in the apprenticeship system, a new model of education started to meet the needs of industrialization. The manual education movement developed in the post-Civil War era to address the concerns of the impact from increased industrialization. The rise in the factory system and other cultural changes led to a need to revamp the existing public school system structure. The increases in immigration, women workers, poverty, and youth unemployment were the contributing factors in the need for reform (Jacob & Grubb, 2002).

Secondary school manual training models were developed to focus on instruction related to the needs of industry (Steinke, 2006). Calvin Woodward created the first
manual school in 1880. Woodward approached education from a stance that manual arts need to be combined with general education programs (Hogg, 1999). The new manual education did not tear down the essential parts of the old but merely added a new method of developing ideas.

Vocational training in secondary schools was established through the work developed by leaders in the manual school movement. Before the manual school movement, secondary schools emphasized a college preparatory curriculum that included classical studies (Jacob & Grubb, 2002). Opponents of manual training believed vocational education was a lower form of education than classical education (Gordon, 1999). The use of manual schools was seen as a way to maintain separation of the working class and the social elite. The foundation for the separation of vocational and liberal acts curricula was established during this period, which set the stage for future legislative movements (Gordon, 1999).

The Smith-Hughes Act of 1917. The first vocational education act passed by the federal government was the Smith-Hughes Act of 1917. This act was developed in response to business needs and to the large numbers of working-class students attending secondary schools (Cohen & Besharov, 2002). Two Democratic lawmakers from Georgia, Hoke Smith and Dudley Hughes, were responsible for this bill that established vocational education. The vocational education federal program was mainly agricultural education at that time. The Act reflected reformers who believed that youth should be prepared for entry-level jobs by learning occupation-specific skills in separate vocational schools. This brand of vocational education had many critics, including leader and educator, John Dewey, known for support of Progressivism. Dewey, as an advocate for
Progressivism, supported education that focused on academics as well as on vocational training. Dewey believed that specific skill training was narrow and that it undermined democracy (Kantor & Tyach, 1982).

The Smith-Hughes Act, however, firmly supported a separate vocational education system and supported courses offered at vocational schools. The emphasis in the differences between academic and vocational schools led to the thought that vocational education was mainly for students who were not pursuing postsecondary education or who could not succeed in the traditional academic settings.

Not all educators believed that vocational education and liberal arts education were two separate pathways for students (Sturko, 2007). The Constructionists believed that information was constructed from previous experiences that led to cumulative knowledge. This idea was the opposite of the Progressivist view of the Smith-Hughes Act creators (Lachinua, 2000). Constructionist leaders, such as John Dewey, argued that there should not be separate vocational and academic pathways. Dewey felt that education should focus on the combined approaches of the two disciplines (Sturko, 2007).

Until 1963, the Smith-Hughes Act and its successors were designed to expand separate vocational education programs. The Acts also were designed to expand these separate vocational education programs, to be able to retain students in secondary education, and to provide trained workers for the growing number of semi-skilled occupation. The Acts focused on support, funding for teacher training, and state support for vocational education through extensive funds and funds matching (Cohen & Besharov, 2002).
Vocational Education Act of 1963. Vocational education was well established by the 1960s. During this period, Congress recognized a need for a new focus as vocational education programs had remained unchanged since the introduction of the Smith-Hughes Act. As a result, the Vocational Education Act of 1963 broadened the definition of vocational education to include occupational programs in comprehensive high schools. These new occupational programs in comprehensive high schools included programs such as commerce and business. The 1963 Vocational Education Act funded the construction of area vocational schools and made provisions for disadvantaged and disabled students (Gordon, 1999).

The Carl D. Perkins Vocational-Education Act. The Carl D. Perkins Vocational Education Act of 1984 continued the support of Congress for effective vocational education programs are important for the nation’s future. The Perkins legislation brought about a systematic change in vocational education theories and practices from the earlier Smith-Hughes Act. The Perkins legislation had a foundational base in social efficiency theory that was based on every student being taught the skills that gave them the opportunity to enter the workforce (Whiteman, 2004).

The Carl D. Perkins Vocational Education Act, commonly called Perkins I, officially began in 1984. The social goal of Perkins I was to provide equal opportunities for adults in vocational education. The Act also was established to inspire workforce skills and preparation to provide learning opportunities for all students and adults (Gordon, 1999). Under Perkins I, 57% of the funding allocated went to the vocational education special population groups within the vocational education programs (Cohen & Besharov, 2000). The Carl D. Perkins Vocational Technical Act of 1990 or Perkins II
was built on the foundation of the previous Perkins I by mandating the inclusion of academics in the applied sense and by providing additional vocational education programs for the entire population (Gordon, 1999). The creators of Perkins II began to see the need to shift vocational education from preparing for occupationally specific skills to preparing students for a more rounded education (Cohen & Besharov, 2002).

On October 31, 1998, President Clinton signed the Carl D. Perkins Vocational-Technical Act of 1998 (Perkins III). The focus of this act was to increase accountability and provide states with more flexibility in using Perkins funds. Perkins III was built on the mandates of Perkins II that required academic integration and stipulated how embedded academics would be measured within the vocational programs. Perkins III mandated that states provide core performance indicators of proficiency to help improve student achievement (McClasin & Parker, 2003).


Linkages between secondary and postsecondary education. In the mid-1900s, educational stakeholders began to demand school reform. The focus of the school reform was on restructuring that called for changes in the way schools and education in general were organized. The restructuring proposals included school choice and site-based management, but more importantly, this reform called for closer linkages between vocational and academic education, schools, and
workplaces and secondary and postsecondary institutions. During this time, the Tech-Prep Education Act of 1990 served as a catalyst to make vocational education a comprehensive enterprise that mutually crossed secondary and postsecondary education. Tech Prep is broadly defined as:

. . . a carefully designed curriculum that engages a high school student in a four-year (two secondary plus two postsecondary) or six-year (four secondary and two postsecondary) plan to gain the competencies (knowledge, skills, and values) required for technical career. (Hayward & Benson, 1993, p. 20)

Federal legislation and funding for Tech-Prep programs were designed to remedy many of the underlying perceived shortcomings in American education. The original intent of Tech Prep was essentially to reform the educational system by developing new pathways for students to enter the workplace, as well as introducing methods of teaching that would be more meaningful to them. These reforms were broad in scope and tended to lean in favor of comprehensive schools and community colleges, with a focus on secondary/postsecondary collaboration, articulation agreements, work-based learning, and extensive interaction with business and industry (Barnett, 2002).

The 1990 amendments to the Carl D. Perkins Vocational Education Act of 1984 created the Tech-Prep Education Act (Title IIIE). The legislation responded to widespread concerns that many American high school students were failing to develop academic and technical skills needed to succeed in an increasingly technological labor market and competitive world economy. According to Hershey, Silverberg, Owens, and Hulsey (1998), more than $568 million in federal funding has been apportioned among
states from 1991 to 1997 under Title IIIE. States were required to use most of these funds to support local consortia of school districts and postsecondary institutions. These consortia were responsible for implementing Tech-Prep.

The Tech-Prep Education Act was responsible for three broad, inter-related concerns:

1. The act promoted a way to improve student preparation for promising careers.
2. The act addressed concerns about the quality of academic and vocational education and sought to enhance the effectiveness of preparing students for careers by closely integrating academic and vocational education.
3. Tech-Prep was conceived to improve education for the neglected American student, the student that is in the middle quartiles of academic achievement. These middle quartile students were likely to finish high school but were unlikely to attend or complete a four-year postsecondary education program (Hershey, Silverberg, Owens, & Hulsey, 1998).

The linkages of secondary and postsecondary education established by the Tech Prep Education Act of 1990 are continuing to prepare students for work. Tech Prep student enrollments are growing. Innovations simulated by Tech Prep hold promise for improving education (Bragg, 2000), with students benefitting when the best of vocational education and Tech Prep are shared widely.

**Integration of academics and vocational education.** The integration of vocational-technical and academic education is the planned coordination and sequencing of courses, curricula, and programs so that students can develop and
achieve both vocational and academic competencies. The integration strives to bring vocational and academic education into one equal relationship.

The early antecedents of the Smith-Hughes Vocational Educational Act of 1967 and the Carl D. Perkins Acts, focused on occupationally specific skills, were becoming looked at as inefficient. Vocational education programs remained unchanged from the inception of the Smith-Hughes Act until the implementation of the Vocational Education Act of 1963. Vocational education until this time focused on the occupational needs of the unskilled population, which was a majority of the people in the United States (Kymes, 2004). The intent of the Act was to provide equal access to vocational education by all students (Gordon, 1999). This Act also involved a shift in the view of vocational education to include a greater number of low income and disabled students from working class families as well as students from immigrant families (Gordon, 1999).

The inclusion of integration of academics to the traditional separatist approach of vocational technical education in the United States brings federal vocational-technical legislation almost full circle in terms of the original intent of the Smith-Hughes Act for a comprehensive framework for vocational technical education (Hayward & Bensen, 1993). Therefore, the early policy antecedents to CTE effectively broadened the reasons for integrating vocational and academic courses. However, many stakeholders were of the opinion that vocational technical education had remained unchanged, and Congress saw the need for change. Employers were complaining to congressional education committees that their newly hired workers were deficient in academic skills (Hayward & Bensen, 1993). Another argument in favor of academic integration was that the majority of secondary students failed to acquire transferrable skills because of the lack of
pedagogical practice (Hayward & Bensen, 1993). The assumption was made that the majority of students would acquire academic skills through contextual learning. Therefore, the policy position became one of not dropping vocational education from the curriculum but one of incorporating academic content into the applied instruction programs using the applied instruction techniques to influence the academic content.

**Historical participation rates in vocational education.** Since federal vocational legislation was enacted in 1917, the law has responded to changing needs and establishing new objectives. Initially, vocational education was a way to prepare immigrant and rural populations to work in factories and on farms (Silverberg, Warner, Fay, & Goodwin, 2004). At some point, vocational education became a form of training that might appeal to less academically oriented students, perhaps keeping them in school by engaging them in activities most relevant to future employment.

According to the National Center for Education Statistics (NCES, 1992), the following populations participated in vocational education during the years of 1969-1990:

- Females were more likely than males to have completed a course in consumer and homemaking education. However, 35% of males completed at least one course in consumer education, with this program previously dominated by females. In general, labor market preparation, 74% of males completed courses compared to 83% of females. However, 91% of males participated in specific labor market preparation (e.g., auto tech, electronics, etc.).
Among racial-ethnic groups in 1987, lower percentages of Asian students completed at least one vocational course, compared with 98% to 99% of those from other ethnic groups.

Virtually all students with disabilities and those without disabilities participated in vocational education. However, students with disabilities were more likely than students without disabilities to have completed a course in general labor market preparation. Approximately 90% of both students with disabilities and those without disabilities completed a course in labor market preparation.

Over time, vocational education has been supported by strategies to keep the United States internally competitive, by delivering advanced technical training to meet the needs of an increasing high-tech economy. More recently, vocational education has been promoted as a strategy to enhance academic learning and promote a clearer pathway to success in college (Warner, Fay, & Goodwin, 2004). As the focus of vocational education has changed, the populations and demographics of contemporary secondary CTE students have changed as well.

According to the NCES (1995) in *Vocational Education in the United States: The Early 1990s*:

- High school vocational course-taking patterns differed for males and females, with male graduates in 1992 earning about one-third more occupationally specific credits, while female graduates earned almost twice as many consumer and homemaking education credits.
- Males in 1992 were more than twice as likely to complete at least one course in trade and industry, while females were more than twice as likely to complete at least one course in health and occupational home economics.

- Between 1982 and 1992, increases in the percentage of students participating in occupational programs that were non-traditional for their gender were negligible.

- The gender gap for trade and industry narrowed over the decade. This occurred because of a drop in the participation rate of males. However, the gap in the participation for males and females remained about the same in agriculture, health, and occupational home economics.

- While females in 1982 were more than one and one half times as likely as males to participate in business, this gap narrowed substantially by 1992.

- Males were more likely than females to be vocational concentrators and specialists, while females were more likely to be in the college preparatory track.

- Males were more likely to concentrate in agriculture, trade and industry, and technical and communication, while females were more likely to concentrate in business, health, and occupational home economics.

**Demographics and Trends of Contemporary CTE Students**

According to the National Center for Educational Statistics (2008) *Career and Technical Education the United States: 1990 to 2005*, no measurable changes were detected in the overall vocational course-taking patterns of public high school graduates.
Some course-taking shifts were detected, however, among the vocational program areas. In 2005, public high school graduates earned more credits on average than in 1990:

- Computer technology, health care, communications technology, childcare, education and protective services were more of a focus in 2005 – 0.04-0.25 more credits and 0.4-2.4 increase in percentage concentrators.
- In 2005, graduates earned fewer credits on average and concentrated less often than the 1990 graduates in business services, materials production and precision production – 0.1-0.3 fewer credits and 1-5 decrease in percentage of concentrators.

Course-taking differences based on race/ethnicity, sex, disability status in grade 12, limited English proficiency in grade 12, mathematics course-taking in grade nine, and the size of the school attended in grade 12 are evident. According to NCES (2008), male graduates who are disabled as of grade 12, or graduated from smaller schools, generally participated more in vocational curriculum than their classmates who are female, not disabled and graduated from larger schools, respectively.

Graduates with disabilities as of grade 12 earned more vocational credits on average (3.5 vs. 3.0 credits) and concentrated in vocational programs areas more often (26 vs. 21 percent) than their classmates without disabilities. Graduates who are Asian, had limited English proficiency (LEP) as of grade 12, or took higher-level mathematics in grade nine generally participated less in the vocational curriculum than their classmates who were from other racial/ethnic groups, were non-LEP, or took mid- to low-level grade nine mathematics. Specifically, the 2005 public high school graduates who are Asian earned fewer vocational credits on average – 2.3 vs. 2.8 –3.1 credits than their classmates.
from other ethnic groups. A smaller percentage of Asian graduates took vocational coursework than Black, White, or Hispanic graduates – 87 vs. 92-94%. Graduates with LEP as of grade 12 earned fewer vocational credits on average – 2.3 vs. 3.1 credits – and completed a vocational concentration less often than their classmates who were non-LEP -- 12 vs. 21%. Graduates, who took geometry or higher-level mathematics in grade nine, took fewer vocational courses – 90 vs. 93%. They also earned fewer vocational credits on average during high school. Student participation patterns also varied among the different vocational program areas by race and ethnicity – Asian graduates earned below average numbers in comparison with the 2005 graduates – graduating less in business services, agriculture, mechanics and repair, materials production, communication technology, construction and childcare. Hispanic graduates earned below average credits in agriculture, business management and communication technology. Graduates from the class of 2005 who were disabled as of grade 12 earned more credits on average than their non-disabled classmates in agriculture, mechanics and repair, materials production, and hospitality and tourism. The number of credits earned by graduates in several occupational areas – business services computers, mechanics, agriculture, and construction – tends to increase as the size of the school decreases (NCES, 2008).

The MMC and Secondary Curriculum

Michigan Governor Jennifer Granholm attended the National Governor’s Conference in Des Moines, Iowa, in July 2005. At that time, Governor Granholm agreed to develop common measures for establishing high school graduation requirements. Initially this was looked at as the first step to make Michigan high schools more rigorous academically and better prepare students for the competitive global economy.
Shahrani (2006) noted that a number of recent educational studies indicate that the key predictor of whether students will graduate from college is not race, gender, ethnicity, or economic conditions; it is whether they complete a rigorous course of study in high school. Michigan, like many other states, increased high school graduation requirements as a part of the high school reform effort. This state effort therefore mandated a complete high school curriculum in state of Michigan for the first time.

Governor Granholm signed the Michigan Merit Curriculum (MMC), House Bill 5606 and Senate Bill 1124, Public Acts 123 and 124 of 2006) into law. The MMC that included a newly developed set of statewide graduation requirements also established benchmarks and standards for all Michigan public high schools. High school reform must proceed to (a) improve achievement, (b) reduce achievement gaps, and (c) better prepare students for postsecondary and career success (Bartik & Hollenbeck, 2006).

Hence, the taxonomy of high school secondary curriculum in Michigan changed in 2006, when the MMC was mandated. The MMC was a major shift in the state. High schools in Michigan went from having only one state-level mandated graduation requirement, one course in civics, to having the most rigorous standards in the United States. The new state graduation requirements moved significantly beyond requirements established by most Michigan state school districts prior to the MMC being mandated.

School administrators in Michigan and teachers of elective programs were very concerned about how the increased academic core requirements would affect CTE and electives. Lazaras and Rogers (2006) noted that increased graduation requirements could affect enrollment in CTE programs. The Michigan Department of Education (2008)
offered suggestions as to how school districts could award some academic credit in CTE programs, thus allowing students to enroll in the CTE vocational class.

Career and Technical courses may be used to help students earn the necessary credits in a variety of required classes. For example, a district may allow a student to receive credit for algebra or geometry in building trades classes if the district determines that a building trades program covers the required high school content expectations for these subjects.

(Michigan Department of Education, 2008, p. 16)

In addition, the Michigan Department of Education (2008) provided several sample schedules to illustrate how schedules could be developed for students who were interested in Career and Technical Education, as well as for students who are interested in band. Tables 1 through 5 present some sample schedules.

Table 1

Sample Student Schedule-Career and Technical Education

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade 10</th>
<th>Grade 11</th>
<th>Grade 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Period 1</td>
<td>English 9</td>
<td>English 10</td>
<td>English 11</td>
</tr>
<tr>
<td>Period 2</td>
<td>Algebra 1</td>
<td>Geometry</td>
<td>Algebra II</td>
</tr>
<tr>
<td>Period 3</td>
<td>World History &amp; Geography</td>
<td>US History &amp; Geography</td>
<td>Government/ Economics</td>
</tr>
<tr>
<td>Period 4</td>
<td>Biology</td>
<td>Chemistry</td>
<td>Science</td>
</tr>
<tr>
<td>Period 5</td>
<td>Health/PE</td>
<td>Visual, Performing, and Applied Arts (VPAA)</td>
<td>CTE</td>
</tr>
<tr>
<td>Period 6</td>
<td>Language Other Than English</td>
<td>Language Other Than English</td>
<td>CTE</td>
</tr>
</tbody>
</table>
Table 2

*Sample Student Schedule – Instrumental Music Emphasis*

<table>
<thead>
<tr>
<th>Period</th>
<th>Grade 9</th>
<th>Grade 10</th>
<th>Grade 11</th>
<th>Grade 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>English 9</td>
<td>English 10</td>
<td>English 11</td>
<td>English 12</td>
</tr>
<tr>
<td>2</td>
<td>Algebra 1</td>
<td>Geometry</td>
<td>Algebra II</td>
<td>Math-Related</td>
</tr>
<tr>
<td>3</td>
<td>World History</td>
<td>US History</td>
<td>Government/Economics</td>
<td>Science</td>
</tr>
<tr>
<td>4</td>
<td>Biology</td>
<td>Chemistry or Physics</td>
<td>Language Other Than English</td>
<td>Elective/Elective</td>
</tr>
<tr>
<td>5</td>
<td>Health/PE</td>
<td>Language Other Than English</td>
<td>Elective/Elective</td>
<td>Elective/Elective</td>
</tr>
<tr>
<td>6</td>
<td>Band</td>
<td>Band</td>
<td>Band</td>
<td>Band</td>
</tr>
</tbody>
</table>

The Michigan Department of Education (2008) also made suggestions about how many high schools have expanded student course offerings with little or no additional costs by going to alternative schedules such as four X four or A/B block scheduling, six period block trimester, zero and seventh hour (modified staff reporting time).

Table 3

*Sample Seven Period Day Schedule*

<table>
<thead>
<tr>
<th>Period</th>
<th>Grade 9</th>
<th>Grade 10</th>
<th>Grade 11</th>
<th>Grade 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>English 9</td>
<td>English 10</td>
<td>English 11</td>
<td>English 12</td>
</tr>
<tr>
<td>2</td>
<td>Algebra 1</td>
<td>Geometry</td>
<td>Algebra II</td>
<td>Math-Related</td>
</tr>
<tr>
<td>3</td>
<td>Earth Science</td>
<td>US History &amp; Geography</td>
<td>Chemistry or Physics</td>
<td>CTE or Elective</td>
</tr>
<tr>
<td>4</td>
<td>World History &amp; Geography</td>
<td>Visual, Performing and Applied Arts</td>
<td>Government/ Economics</td>
<td>CTE or Elective</td>
</tr>
<tr>
<td>5</td>
<td>Health/PE</td>
<td>Language Other Than English</td>
<td>CTE or Elective</td>
<td>CTE or Elective</td>
</tr>
<tr>
<td>6</td>
<td>Language Other</td>
<td>Elective/Elective</td>
<td>CTE or Elective</td>
<td>CTE or Elective</td>
</tr>
</tbody>
</table>
Table 4

Sample Four X Four Block/AB Block Schedule First Semester or A Schedule

<table>
<thead>
<tr>
<th>Grade 9</th>
<th>Grade 10</th>
<th>Grade 11</th>
<th>Grade 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block 1</td>
<td>English 9</td>
<td>English 10</td>
<td>English 11</td>
</tr>
<tr>
<td>Block 2</td>
<td>Algebra 1</td>
<td>Geometry</td>
<td>Algebra II</td>
</tr>
<tr>
<td>Block 3</td>
<td>Health/PE</td>
<td>Language Other</td>
<td>CTE or Elective</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Than English</td>
<td></td>
</tr>
<tr>
<td>Block 4</td>
<td>Elective</td>
<td>Elective</td>
<td>CTE or Elective</td>
</tr>
</tbody>
</table>

Table 5

Second Semester or B Schedule

<table>
<thead>
<tr>
<th>Grade 9</th>
<th>Grade 10</th>
<th>Grade 11</th>
<th>Grade 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block 1</td>
<td>World History &amp;</td>
<td>US History &amp;</td>
<td>Physics</td>
</tr>
<tr>
<td></td>
<td>Geography</td>
<td>Geography</td>
<td></td>
</tr>
<tr>
<td>Block 2</td>
<td>Biology</td>
<td>Chemistry</td>
<td>CTE or Elective</td>
</tr>
<tr>
<td>Block 3</td>
<td>Visual, Performing</td>
<td>Elective</td>
<td>CTE or Elective</td>
</tr>
<tr>
<td></td>
<td>and Applied Arts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Block 4</td>
<td>Elective</td>
<td>Elective</td>
<td>CTE or Elective</td>
</tr>
</tbody>
</table>

Greater secondary and postsecondary partnerships should be enhanced due to the introduction of the MMC. The MMC will facilitate secondary and postsecondary systems in Michigan to work closely to align high school curriculum content and college requirements. Michigan policy-makers’ goal is to double the number of college graduates in the state in order to make Michigan fertile ground for the jobs of a new economy. College graduates in the United
States earn on average of 80 percent more than high school graduates—a gap that has more than doubled in the past decade. (Shahrani, 2006, p. 1)

High rates of remediation, especially remediation in math at the postsecondary level, have been a concern for both secondary and postsecondary institutions. With a greater emphasis on math at the secondary level, a greater number of students will be prepared to participate in postsecondary education. A high level of concern has been discussed among various stakeholders regarding the MMC requirement that all Michigan high school students have to complete four years of math, especially algebra II. Recent ACT data for the class of 2006 in Michigan found that only half of the students met college readiness benchmarks in math and reading. This ACT study also indicated that rigorous courses in algebra improve students’ chances of college success (Shahrani, 2006). According to the National Center of Educational Statistics (NCES, 2000), 27% of students who need remediation earn an associate or bachelor’s degree within six years of entering college, whereas 65% of students who require no remediation earn their degrees in four years. This same report found that, on average, 1982 public high school graduates who were enrolled in public postsecondary education completed most of their remedial course work in math (53% compared to 9% in English and 38% in other areas (NCES, 2000).

**Dual Enrollment**

Vocational education is both a high school and a postsecondary program, but the fundamental policy concerns for each are quite different. Postsecondary vocational programs can help students obtain a postsecondary degree or certificate and provide entry level skill training, skill upgrading or retraining so that individuals can find jobs or get
better jobs and build a better capacity in particular strategic industries or occupations (Silverberg, Warner, Goodwin, & Fong, 2004).

The growing interest in dual enrollment serves as a catalyst to postsecondary participation. One is low postsecondary completion rates. A survey by the National Association of Secondary School Principals (NASSP) found that 92% of middle school students indicated that they would probably attend college (Markow, Liebman & Dunlar, 2007). However, other reports and statistics show this finding is far from the reality of what occurs when these students finish high school. According to the Digest of Education Statistics (2004), the percentage of high school graduates who actually begin college at a two-year or four-year institution immediately after high school is approximately 67%. Even fewer of these students are expected to complete a postsecondary credential once enrolled in college (Digest of Education Statistics, 2004). While acquiring some college credit increases individual earnings by a small amount, the real payoff comes with the completion of some type of postsecondary credential certificate or degree. Unfortunately, only about a quarter of those who begin college will earn a degree in a reasonable amount of time (Ewell, Jones, & Kelly, 2003).

The high aspirations of young students combined with low postsecondary enrollment and completion rates have cast a spotlight on the need to transition from secondary education to postsecondary education. Programs such as dual enrollment can help ensure that students continue on a seamless pathway toward a postsecondary degree or credential. The issue of increasing secondary-postsecondary transitions involves improving several individual outcomes, including increasing preparedness of secondary
students, decreasing postsecondary remediation rates, and increasing postsecondary enrollment and persistence toward completion (ACTE Brief, 2007).

Community colleges and other postsecondary institutions are interested in dual enrollment because it is looked at as a way to reduce remedial coursework in postsecondary institutions. Public high school graduates in 1982 who enrolled in postsecondary education by 1992 earned approximately 1.5 remedial credits in postsecondary coursework on average. In general, vocational concentrators completed more remedial course work (1.8 credits) than their non-vocational peers (National Center for Education Statistics, 2000).

A second reason for the growing interest in dual enrollment is that students fail to understand what is expected of them in postsecondary education (Bailey, Hughes, & Karp, 2002). A need exists for much stronger communication and collaboration between secondary and postsecondary systems. “Dual enrollment thus requires the engagement of college faculty with high school personnel and their students” (Hughes, 2010, p. 12). This type of communication and engagement can help students understand what they need to know and be able to do. In many cases, this understanding may motivate students to take their studies more seriously.

Hughes (2010) stated that there has not been a great deal of rigorous research on the impact of dual enrollment participation, but she noted a wealth of benefits to dual enrollment participants. Dual enrollment is positively related to students earning a high school diploma, to college enrollment, to persistence in college, and to higher postsecondary grade-point averages. Hughes (2010) also noted that students participating in her studies were more likely to enroll in a four-year institution, perhaps indicating that
the dual enrollment experience provided the skills and confidence to increase their educational aspirations.

Finally, support for the growing interest in dual enrollment in secondary education is the lack of credits accumulated by high school graduates in their early years of postsecondary enrollment. The U.S. Department of Education in the Tool Box Revisited (2006) stated that in both colleges and community colleges, the curriculum story line intersects attendance patterns and performance as benchmarks for academic advisement and intervention:

Less than 20 credits by the end of the final calendar year of enrollment is a serious drag on degree completion. It is even more reason to begin the transition process in high school with expanded dual enrollment programs offering postsecondary course work so that students enter higher education with a minimum of six additive credits to help them cross that 20-credit line (p. xx)

Interest has grown in the community colleges regarding dual enrollment and vocational programming for several reasons. Programs of study were one highlight of the Perkins IV Act passed by Congress in 2006. Dual enrollment was one of the key elements of programs of study that were defined and referenced in the Perkins IV Act. “These programs of study are defined and referenced throughout the Act and are designed to seamlessly link a student’s entire secondary and postsecondary education experience” (ACTE, 2007, p. 2). States must develop programs of study in collaboration with local programs that may be offered by each local school district and community or technical college receiving Perkins Funds.
CTE has been involved in the dual credit/enrollment movement, thus serving as a catalyst to postsecondary participation and vocational programming at community colleges. About half of the schools offering dual credit offered courses with a CTE focus, and approximately 36% of students enrolled in dual credit programs also were enrolled in CTE courses (Wells, Setzer, & Lewis, 2003). In many places, the population of students reached through CTE dual enrollments is more diverse than students enrolled in academic dual enrollment. Increasingly, dual enrollment is becoming integrated into CTE models, such as programs of study, career clusters, and career pathways (ACTE, 2007).

The Community College Research Center (2009) recently has studied the impact of CTE dual enrollment programs using the Florida and City University of New York (CUNY) models. Preliminary results from the study showed that students from the 19 CTE high schools in New York who enrolled in a CUNY College and who took at least one dual enrollment course while in high school were more likely to obtain positive outcomes than their classmates who did not dual enroll. The students who participated in dual enrollment were more likely to pursue bachelor’s degrees, have higher first semester grade point averages, and earn more credits during their first three-and-one-half years of postsecondary education.

The Multiple Streams Framework

**Overview.** Kingdon’s Multiple Streams framework raises key questions about political behavior in education, such as how do subjects, issues, and problems come to an official’s attention? How are alternatives generated from which they can choose policy options? Why does an idea’s time come when it does? (Kingdon, 2010). These policy streams help to explain why some issues are given attention by policy-makers whereas
others are ignored or voted down. Kingdon’s (2010) model focused on three distinct, but complementary, processes, or streams: (a) problem, (b) policy, and (c) political in policy-making. The coupling of these streams allows, at any given context, for a particular issue to be turned into a policy. Kingdon (2010) described the Multiple Streams Policy Framework in terms of these three streams, which are normally separate and somewhat independent.

The problem stream – The rationale behind this stream is that a given situation has to be identified and explicitly formulated as a problem or issue if it has a chance at becoming a policy. A situation that is not defined as a problem or issue, and for which alternatives are not proposed, will never be converted into a policy. A feeling that a current situation is wrong and that something should, and can, be done to change or improve it can be a reason for turning an issue into a policy. However, it is necessary to demonstrate that the problem actually can be attributed to causes within human control, leading to action being taken to change the situation.

The policy stream – This stream involves the formulation of policy alternatives and proposals. New policies will never be formed if there are no ideas on policy proposals on which they can be based and developed. An important aspect of the multiple streams model is the idea that proposals and solutions must be technically feasible. These technically feasible proposals and solutions may not be set up initially to resolve problems. Many times these proposals and solutions are looking to attach themselves to problems. A variety of actors can participate in the elaboration of solutions and alternatives and in the drafting of proposals for policy reform.
The political stream – This stream takes place independently of the other two streams. Political events, such as an election or a change in government, can lead to a topic and/or policy to be included or excluded from the agenda. The special needs and dynamics created by certain political events may even change the agenda. In the political stream, consensus is usually reached because of bargaining rather than persuasion. Therefore, more attention is paid to assessing the costs and benefits of a policy proposal than to underlining its relevance and its analytical importance.

The political stream is where key participants in decision arenas of the legislature or executive branches propose, debate, enact, or resist specific policy initiatives. Specifying alternatives and policy implementation also occurs in this stream. This stream is also referred to as the solution stream. A possibility involving the MMC utilizing the Multiple Streams Framework and the solution stream could be in this stream. Often in this stream, competing policy ideas to address particular issues are tested, discussed, combined, and revised. The one area of public policy identified by Kingdon (2010) as making authoritative choices occurs during this stage. The solution stream was beginning to surface. The solution associated with the lack of rigor in the high school curriculum was achieved by creating consistent, formalized requirements for high school graduation to enable students to pursue postsecondary education. The MMC differentiated between academic credits and courses. Local districts decided how they would award credit, but courses were required to meet certain content standards for students to receive credit (Michigan Department of Education, 2008).

As stated previously, these three streams are separate and independent. Recognition of problems, formulation of policy proposals, and political events all have
their own dynamics, and then proceed at their own pace. Hence, no stream is decisive to
the overall policy process. All of the streams are important. When they meet and
coincide, an issue is transformed from a topic or problem into a concrete policy.
Therefore, a compelling problem is linked to a plausible solution that meets the test of
political feasibility. For example, supporters of a given policy reform take advantage of a
political context that favors and seeks new ideas and approaches, claiming that their
proposal for reform is also a solution to a previous problem. This example of a complete
linkage of the three streams increases the chances of an issue becoming a policy.

It is not necessary for all three streams to meet simultaneously for a policy to
develop. In some cases, partial couplings, the convergence of two streams, are sufficient,
although the whole policy-making process is more uncertain.

Kingdon (2010) argued that policy entrepreneurs play a key role in connecting the
streams, and that there are different types of couplings. Couplings can be “tight” or
“loose” depending on the degree to which the specific streams, though independent,
depend on each other for an issue to develop into a concrete policy.

The multiple streams model does not define the policy-making process as one that
flows through specific steps and stages. The policy process is the result of the intersection
of at least two independent streams at one time. There is no chronological sequence or
priority of the streams. Streams act and react according to their own logic, until a window
of opportunity opens and two or more streams coincide and become a policy. “Kingdon’s
model purports to make sense of how agendas, problems, and politics come together
during a window of opportunity, to result in public policies” (Stout & Stevens, 2000, p.
341).
Previous research has applied Kingdon’s model in examining K-12 education policy-making (e.g., McDermott, 2005; Stout & Stevens, 2000). Kingdon’s framework as the conceptual underpinning is used to examine how the policy that was developed from the Cherry Commission’s work and the law that mandated the Michigan merit curriculum (MMC) for all Michigan high schools starting with the graduating class of 2011 may bear any impact on dual enrollment and CTE in a southeastern Michigan high school.

To address the area of low-test scores on the MEAP and other standardized tests, the solution stream offered the elimination of the MEAP and the replacement of it with the American College Test (ACT) assessment and the Michigan Merit Exam (MME). This change was one of the MMCs most contentious issues on the State of Michigan’s education policy agenda. A debate in the State of Michigan ensued regarding replacing the MEAP with the ACT assessment (Feighan, 2004) and, subsequent to the commission’s recommendation, made changes. There were advantages and disadvantages to both tests. The MEAP was designed to align with standards included in the Michigan curriculum framework that established criteria for mastery of material (Michigan Department of Education, 2004). The ACT, conversely, is the primary college entrance examination for Michigan and is used to predict student success in college. However, each test encompasses Michigan standards.

At this time, scores that students needed to achieve on the ACT/MME and the PLAN precursor tests are being used to allow students to participate in dual enrollment. Finally, another possible solution stream that drew political attention focused on the requirement that all children complete and pass Algebra II to graduate from a Michigan
high school. The Cherry Commission, formed in 2004 during what could be a policy stream, resulted in the MMC that was mandated in 2006.

In the multiple streams framework, policy-making occurs when the three streams converge during the window of opportunity (Stout & Stevens, 2000). This window opens with the occurrence of an event in either the problem or political stream (Kingdon, 2010). Other possibilities utilizing the Multiple Streams Framework suggest that the problem stream and the solution stream lead to opening a window of opportunity for the political stream that resulted in the development of the MMC.

Because of mandating the MMC in 2006, another potential problem stream developed. Further adding to the problem stream was the apparent impact of the MMC on CTE programs. As the focus of the MMC has been on core academic areas, concerns were raised among CTE personnel and their various stakeholders due to the potential impact the MMC would have on CTE programs. Recent research suggested that students would have fewer opportunities to elect CTE programs due to the mandated MMC. This mandate is believed to have resulted in declining CTE course enrollment (Camp & Heath, 2007). A decline in CTE enrollment is emerging, with CTE program completers decreasing 2.8% nationally, since the adoption of the NCLB act (Fletcher, 2006). Student participation in core academic courses due to the requirements of the MMC has led to declining CTE enrollments and elimination of CTE programs in some schools (Fletcher, 2006).

**Shifts in Industry Needs**

Shifts in industry in the Detroit area, changes in demands of the global economy, and swiftly advancing technological changes also have affected CTE programs in the
Demands for global skills for workers have challenged the traditional CTE approach for training students to attain specified skills and occupations. The revised model focuses on training students for a wider variety of workplace skills (Stone, Kawaske, & Alfeld, 2004). The focus has moved from low-skill jobs to jobs that focus on educational quality and greater career chances (National Center for Education, 2007). For CTE programs to meet the needs of the high-skills, high-demand labor market and CTE programs need to modify and adjust curriculum to keep pace with the changing marketplace (Stone, 2005).

Puentis-Markides (2007) defined agenda-setting as a political process that is conflictive and competitive. Furthermore, Puentis-Markides (2007) added that agenda-setting is contingent on identifying competing entries on policy agendas, influencing groups to action, determining positions and views of key policy-makers, and recognizing preferences of both interest groups and decision-makers.

Kingdon (2010) suggested proposals that land on the agenda (agenda setting) through a process of coupling result from policy-makers taking advantages of policy windows or opportunities. The problem stream or the political stream is activated by attaching the problem to a preferred solution and pushing it through a receptive political system. Therefore, to achieve success, policy-makers need to be prepared to act quickly when a window of opportunity opens or the opportunity may be lost before policy-makers have the chance to have their proposals accepted.

Kingdon’s theory is used as the conceptual underpinning to aid in examining perceptions of students, teachers, and key administrators regarding the MMC and dual enrollment. The conceptual underpinning is also used to determine if the MMC
influenced CTE programs and enrollment in the southeastern Michigan high school selected for this study.

Multiple Streams Framework, Educational Leadership, and Praxis

All of the aforementioned applications of Kingdon’s theory can add to the educational leadership knowledge base and can enhance educational leadership praxis. This study adds to the limited research on the MMC, CTE, and dual enrollment in Michigan. The study extends current research beyond existing knowledge and can provide a deeper, more thorough level of understanding of the topics. Insights will be made into how the various stakeholder groups feel about the MMC, CTE, and dual enrollment. In addition, this research serves to inform a larger community of researchers and fills a gap in existing literature. This study also adds to the educational leadership knowledge base and impact praxis because a voice will be given to stakeholders who are not generally heard from. Perspectives in the educational community will be broadened. Administrators and parents of CTE and dual enrollment students will be able to add their views to a growing body of knowledge. The research study also extends current research by considering perceptions of stakeholders in a southeastern Michigan high school regarding the MMC reform policy and its impact on CTE and dual enrollment. The study influences and informs praxis in several ways. The information may validate current practice or determine the need to change current practices. The study can inform or improve current practice by providing practitioners with ideas, insights, and solutions. The study can provide information to stimulate conversations as policy-makers continue to debate high school reform.
Johnson and Immeruahi (1994) argued that those educators involved in school reform need a clear understanding of what the public wants from its schools and how their expectations match perceptions of what is happening in the schools. In conclusion, policy-makers at all levels (e.g., school board members, and administrators) can use the results of this research study to examine perceptions of various stakeholders so that these policy-makers can better represent their constituents when debating or taking a position about high school reform and its impact on CTE and/or dual enrollment.

Kingdon’s model represents an environment where policy change can occur rapidly and policy outcomes may differ substantially from the past. Therefore, the multiple streams framework challenges several key tenets of rationalism by rejecting many models of decision-making and notions that problems must precede solutions. Sometimes solutions may actually precede the problems to which they become attached.

Kingdon’s multiple streams framework is said to have explanatory power. McLendon and Cohen Vogel (2008) stated that a number of studies have begun examining the model’s explanatory power in various policy domains at both the national level and in the states. Analysts have critically applied the multiple streams framework in the arenas of health care, environmental policy, and national defense policy (Blaukenau, 2001).

A growing body of literature has critically applied the Multiple Streams framework in investigating various policy phenomena in both the K-12 and higher education sectors (Leslie & Budahl, 2006; McDermott, 2005; Stout & Stevens, 2000). These studies have found support for the multiple streams framework. Several analysts of K-12 education policy-making have also found the framework capable of capturing the
nature of change in the domain (McLendon & Cohen-Vogel, 2008). McDermott’s (2005) analysis of the adoption in Massachusetts of policies providing for alternative certification and pay incentives for teachers is notable in this regard.

More than 30 years after its emergence in the political science literature, the multiple streams model remains a distinctive and provocative explanation for policy change in American government. Kingdon developed the framework for use in describing complex agenda-setting phenomena in the federal government. A brief discussion of other theories and models that support educational mandates, school reform, and rigor follows.

**Punctuated Equilibrium (PE) Theory.** Punctuated equilibrium (PE) describes evolutionary change as taking place over long periods of “stasis” in which species remain virtually unchanged, punctuated by relatively brief periods of intense change when new species are introduced, old ones die out, and existing ones undergo transformation (McLenden & Cohen-Vogel, 2008). In the 1980s, these ideas emerged in political science as a way for theorists to view the dynamics of change in American governmental systems. Kelly (1994) characterized PE as a sudden, transformative change in an otherwise stable system. Kelly added that PE extends beyond the natural sciences, finding reliance in political science and policy studies. PE now stands as a leading political science models for policy change, due to the work of Baumgartner and Jonas (1998).

Seven characteristics of PE theory according to McLendon and Cohen-Vogel (2009) are

1. The result of the pioneering work of Baumgartner & Jonas (1998).

2. The original unit of analysis – U.S. federal government.
3. Theoretical origins – evolutionary biology; political science.

4. Policy stage of primary focus – agenda setting and policy enactment.

5. Central premise or hypothesis – policy changes a product of intersecting policy venues and images, which challenges existing monopolies before giving rise to new ones.

6. Major constructs or concepts – policy images, monopolies, negative feedback, policy statistics, policy punctuation.

7. Dominant methodological tradition – content analysis of archival data combined with trend analysis using various statistical techniques.

PE has been used as a framework to understand educational policy-making, although the literature on the application of PE to educational policy-making is less robust than that on such topics as electoral politics (Kelly, 1994) and environmental policy (Baumgartner & Jonas, 1993).

**Policy Innovation and Diffusion Theory.** Seven characteristics of policy innovation and diffusion theory according to McLendon and Cohen-Vogel (2008) are

1. The result of the pioneering work of Walker (1969), Gray (1973), and Berry & Berry (1999).

2. Original units of analysis – American states.

3. Theoretical origins – rural sociology, anthropology, communication theory, organizational studies, political science.

4. Policy stage of primary focus – policy enactment
5. Central premise or hypothesis – policy adoption of a product of certain factors internal to states in combination with competitive or emulative pressures between and among states.

6. Major constructs or concepts – American states as a policy subsystem, communication networks, s-curve of policy adoption, intrastate policy adoption, intrastate competition and emulation, innovation leaders and laggards.

7. Dominant methodological – event history traditional analysis.

Policy innovation and diffusion theory has been used to study educational policy-making in a limited sense. The first education diffusion studies were conducted at Teachers College in the mid-20th century (Cohen, 2005). Later research focused on the teacher as the unit of analysis to explore within-school diffusion. According to Cohen-Vogel, Ingel, Albee, & Spence (2004), few scholars have used innovation diffusion lens to study educational policy innovation and diffusion theory empirically.

**The Garbage Can Model.** Organized Anarchies (Cohen, March, & Olsen, 1972) are characterized by three general properties: problematic preferences, unclear technology, and fluid participation. In an Organized Anarchy model, situations may fail to adhere to the conditions of more classical models of decision-making. Organized anarchy can include all or a partial piece of the following: problematic preferences, unclear technology, or fluid participation.

The three organizational theorists studied universities, a recognized form of organized anarchy, and found that such organizations can be viewed as collections of choices looking for problems, issues, and feelings looking for decision situations;
solutions looking for issues to which there might be an answer; and decision-makers looking for work. The theorists created the Garbage Can Model in hopes of understanding Organized Anarchies.

The Garbage Can Model is one in which problems, solutions, and participants move from one choice to another in such a way that the nature of the choice, the time it takes, and the problems it solves all depend on a rather complicated inter-meshing of elements. These elements include the variety of choices available at any point in time, the mix of problems that are afforded access to the organization, and the mix of solutions looking for problems and choices. Although decision-making is perceived as a process for solving problems, in reality, this is not what usually occurs. Problems are tackled in the context of some choice, but choices are made only when the shifting combination of problems, solutions, and decision-makers decide to make action a possible pathway. One can view choice opportunities as garbage cans. Various types of problems and solutions are dumped into the can, and the mix of garbage depends on the mix of labeled cans available. The mix of garbage also depends on the speed in which the garbage is sorted and when order and structure evolves. Cohen, March, and Olsen’s (1972) model is similar to Kingdon’s Multiple Streams Framework for example, when problems, solutions, authoritative choice-making, and specifying alternatives are taken to the garbage can and ultimately things tend to come together during the window of opportunity for certain solutions to surface (Kingdon, 2010).

**The Eightfold Path to More Effective Problem Solving.** Drawing upon his experience teaching graduate-level workshops at the University of California at Berkley, Eugene Bardach (2000) used real-world examples to illustrate his eight steps for policy
analysis. For example, in his practical guide to policy analysis Bardach contended that a basic, eightfold approach can be applied to analyzing most policy problems. The approach requires us to define the problem, assemble some evidence, construct the alternatives, select the criteria, project the outcomes, confront the trade-offs, decide, and tell the story. Bardach’s approach clearly derives from microeconomic and cost-benefit analysis. Mintrom (2003) stated that a mainstream style for conducting a policy analysis is very prevalent today. Mintrom also noted that most of these practices derive from microeconomic analysis. This analysis includes individual choice and trade-offs, the analysis of markets and market failure, and the application of cost-benefit analysis. A brief summary of Bardach’s eightfold path to effective problem solving follows:

- **Part I: Define the problem** – This is a crucial step. It gives (1) a reason for doing all the work necessary to complete the project, and (2) a sense of direction for evidence-gathering. In the last phases of the policy analysis, the final problem definition will probably help you structure how to tell your story.

- **Part II: Assemble Some Evidence** – All of the time doing a policy analysis is spent in two activities – thinking and gathering data. Of the two activities, thinking is by far the most important, but gathering data takes much more time. Time is spent reading documents, hunting in libraries, poring over studies and statistics, interviewing people, traveling to interviews, and waiting for appointments.
- **Part III: Construct the Alternatives** – The author defined alternatives as policy options, alternative courses of action, and alternative strategies of intervention to solve or mitigate the problem.

- **Part IV: Select the Criteria** – Bardach said that this is the most important step for permitting values and philosophy to be brought into policy analysis. The reason is that criteria are evaluative standards that are used to judge the goodness of the projected policy outcomes associated with each of the alternatives.

- **Part V: Project the Outcomes** – The author stated that this is the most difficult step in the eightfold path. It involves for each of the alternatives on the current list, projecting all of the outcomes (or impacts) that the interested parties might reasonably care about.

- **Part VI: Confront the Tradeoffs** – Bardach referred to dominance in this step or path. He referred to a possibility of one of the policy alternatives under consideration being expected to produce a better outcome than the other alternatives. The author stated there are no tradeoffs among the alternatives. He also noted that clarification must be made between the tradeoffs associated with different policy options.

- **Part VII: Decide** - This step appears as a check on how well things have developed to this point. The author stated that the decision-maker must decide what to do according to their analysis.
Part VIII: Tell the Story - Bardach stated that after many interactions of the eight steps. The decision-maker is then willing to tell the story to an audience.

Bardach’s (1981) earlier work focused on a more practical approach aimed at providing precise formulation of public problems so that the problem could be solved. This approach is often referred to as the policy stream. Although the policy stream involves an analysis of different subjective approaches to problems, the basic motivation behind policy stream activities is to help find a solution to a public issue. Policy streams are not designed to understand why a certain public issue is defined exactly the way it is. Bardach, and others like him involved in policy stream development and analysis, are more concerned with the methodology and the methods of problem formulation.

Bardach (2000) also formulated several key requirements of problem formulation. Problem defining refers to activity that provides a precise definition of a problem that fulfills the requirements of policy analysis. Bardach’s (2000) key requirements include:

- It is analytically manageable
- It makes sense in light of the political and intuitional measures available for mitigating
- It should be clear and persuasive to the public
- It should avoid including a potential solution to the problem

Bardach’s work in many ways closely resembled the work of Kingdon (2010). Bardach’s work in the early 1980s involved political streams and problem streams as separate and isolated issues. According to Vesley (2007), the two basic approaches
should be integrated into one synthetic framework for problem delineation, as they are not mutually contradictory. Kingdon’s Multiple Streams Framework can be considered as an extension of Bardach’s work. Kingdon’s framework moves beyond policy analysis, policy development, and problem formation. He included agenda change resulting from the window of opportunity opening through semi-related problems, solutions, and political streams.

States have taken back much of their constitutional authority over educational policy in the past thirty years. In education, state policy actors are considerably more important than federal or local ones. Because both political science and mass media emphasize policy-making at the federal level it is often misunderstood.

**Frances Fowler: education policy and theory.** Frances Fowler (1999), in her book *Policy Studies for Educational Leaders: An Introduction*, described an issue, definition, and the agenda-setting phases of the policy process. Fowler stated that for a policy to be important, it must be well defined. To reach the policy agenda phase it must be believed to be important by a large number of people. If it never reaches the policy agenda, it will never become formal policy. Fowler’s framework involves issue definition, setting the stage, policy agendas, policy formulation, and policy adoption. A brief discussion of each of the topics follows:

- **Issue Definition – Setting the Stage:** Defining a policy issue is a political process that involves transforming a problem into an issue that the government can address. It involves developing an attractive image of the issue and associating appealing symbols with it in order to attract public support. The Policy Agenda: In order to have a chance to become an actual
policy, an issue must reach the policy agenda, and this occurs neither easily or automatically. A policy agenda comprises all of those issues under serious discussion in relation to a specific policy domain. In the broadest sense, the education policy agenda includes all issues under discussion at professional conferences, in education journals, among well-informed educators, in mass media, among the public and amongst government officials (Kingdon, 2003, p. 20).

- **Policy Formulation and Policy Adoption** – According to Fowler, three things must occur during policy formulation and adoption: (1) The policy is expressed in written language, (2) funding or the lack of funding is established, and (3) a policy as formulated must be adopted. Fowler’s theory involves policy formulation and adoption in three arenas: legislation, administrative agencies, and courts.

Fowler’s (1999) work described ways that school leaders, in particular, can follow and influence the process. Her work focused on the state-level of policy-making. The author’s theory also focused on education policy and the study of education policy. The author studied education policy and offered advice for educators and educational leaders in being attuned to the emerging policy agendas. Fowler also suggested that well-informed school leaders can often advance the issues that they support in this arena. Edward St. John (1992) argued that one of the most effective things school leaders can do to influence agenda setting is to develop exemplary programs to address education problems at the local level. Government officials look for examples of successful practice and then develop policy proposals.
There are several similarities among Kingdon (2010) and Fowler’s (1999) frameworks. However, Kingdon’s work suggested a recycling of policy ideas, as solutions are dependent on the political environment. The political agenda and policy solutions are subject to incremental changes and revamping following policy adoption in this non-cyclical, unsteady, and shifting policy environment. Fowler’s work aligns more with the Comprehensive/Rational view of the policy process that pushes policy initiatives on the agenda not to solve problems but to provide a satisfactory response to ease the political pressures surrounding the perceived social dilemma (Simon, 1976). In addition, Fowler referred to policy agendas, policy adoption, and formation that parallel what Kingdon (2010) denoted as the political stream, problem stream, and solution stream. Work by Cohen, March, & Olsen (1972) highlighted the loosely-coupled nature of the policy process as their Garbage Can Model like Kingdon’s works from the presupposition that the problems, solutions, and politics are not readily sequential. Independent streams develop and converge to produce a window of opportunity, resulting in policy actions that initiate change.

Summary

This chapter provided a historical perspective of CTE programs, with a focus on secondary education. In this historical context, the legislative efforts that shaped current CTE programs were noted. The chapter also included literature on the MMC, dual enrollment, and vocational education. Chapter 2 is separated into categories that include a historical review and an overview of Kingdon’s Multiple Streams Framework. Linkages between secondary and postsecondary education are included. The integration of academics and vocational education as well as information regarding populations that
historically participated in vocational education is also included in Chapter 2. The concluding portions of the chapter examine demographics and trends of contemporary CTE students, the MMC and the secondary curriculum and dual enrollment.
Chapter 3: Methodology

The purpose of this bounded case study was to explore student, teacher, and administrator perceptions of the MMC on student performance and outcomes. The study also examined how the MMC as an educational reform policy was perceived to affect CTE and dual enrollment in a southeastern Michigan high school. Additionally, the study examined problems associated with Michigan public education and politics regarding academic rigor and high school reform.

The framework that supports the decision to use qualitative descriptive case methods as the appropriate method to collect and analyze data is presented in Chapter 3. Each of the following topics is presented separately: the conceptual underpinning, research design, appropriateness of qualitative design, bounded case study use (theoretical framework), focus group use, role of the qualitative researcher, reflexivity, sampling, and data collection.

Conceptual Underpinning

Kingdon’s (2010) Multiple Streams Policy Framework provided conceptual underpinnings for examining how the policy that developed from the Cherry Commission’s work and the law that mandated the MMC for all high schools may impact dual enrollment and CTE in the high school.

Kingdon (2003, 2010) described the Multiple Streams Policy Framework in terms of three streams, which are normally separate and somewhat independent. The first stream is the problem stream in which various issues compete for priority and attention on the agendas of policymakers. Second is the solution stream, where various often-competing policy ideas for addressing particular issues are tested, discussed, combined,
and revised. The third and final stream is the political stream. Key participants in the legislative or executive decision-making branches propose, debate, enact, or reject specific alternatives to policies.

In the Multiple Streams Framework, policy-making will occur when the three streams converge during a window of opportunity (Stout & Stevens, 2000). This window opens by an event in either the problem or political stream (Kingdon, 2003, 2010).

Prior to the formation of the Cherry Commission, many felt that there was a lack of rigor in Michigan high school programs and courses. Further, along with a lack of rigor in Michigan high schools, many felt that the senior year in high school was not challenging for many students. Increasing high school dropout rates was also an area vying for attention in the problem stream.

Kingdon (2003) asserted that low standardized test scores on high-stakes tests, such as the MEAP, and decreasing funding for schools in Michigan were other educational issues competing for attention in the policy stream.

Together, all of these issues and concerns produced the perfect situation for the window of opportunity for policy-makers to create consistent requirements for graduating from high school in Michigan. The State of Michigan adopted the MMC in 2006. Prior to that year, school districts set their own requirements for high school graduation.

According to Kingdon (2003, 2010), public policy develops when a series of events occur in a politicized setting and when stakeholders rally for policy issue. Kingdon (2010) also described the four parts of public policy: (1) agenda setting, (2) specifying alternatives, (3) making authoritative choices, and (4) implementation of the policy decision. Currently the problem stream appears relatively flat, as legislators and
educators are said to be considering revising the MMC to better accommodate all students’ learning interests. Brighton Republican Representative Bill Rogers, Chair of the House Appropriations Subcommittee on Education, says that the MMC requirements are an overreach, as it pushes all students in a straight line to college, alienating those who are interested in pursuing a skilled trade (Kanclerz, 2011). The Michigan Department of Education continues to insist that the MMC is flexible enough to provide options for students. However, Representative Rogers stated that revisiting the MMC standards should be a priority of the legislature. He said that the MMC was well intended but, ultimately, made education less flexible for local districts. It appears that the window of opportunity for policy-makers may reopen due to the politics centered on the belief that more flexibility is need in the MMC. Kanclerz (2011) noted that Rogers said that his committee does have curriculum reform on its agenda but will not get into it until 2012 due to other priorities in education reform.

The political stream is currently active due to higher expectations that were recently established for Michigan schools to make AYP. The Michigan Department of Education stated that current MEAP and MME scores are based on skills that are sufficient to succeed in an old manufacturing economy. It was noted that the higher expectations set for schools reflects the new Michigan economy that focuses on preparedness for college, careers, and students being on track in elementary and high school (Michigan Department of Education, 2011).

The political steam centered on the issue of rising test cut scores will likely continue to be active. According to the Michigan Department of Education (2011), even though state test scores have been on the rise, the higher proficiency targets that are
required to meet the NCLB Act have resulted in fewer schools making AYP. State Superintendent Mike Flanagan stated that high expectations are needed for Michigan schools to prepare students for the competitive global economy. Flanagan said that he expects the percentage of schools making AYP to continue to fall in 2012 as Michigan is raising the assessment cut scores, which determine student proficiency (Michigan Department of Education, 2011).

This bounded case study examined how the MMC has influenced course selections and dual enrollment in the high school. It also examined the perceptions of students, teachers, and key administrators regarding how the MMC and dual enrollment have influenced CTE in the southeastern Michigan high school. Through information gained from the focus group interviews, the study attempted to uncover problems and politics that developed from the MMC educational reform policy mandate. The following MMC model applying the Multiple Streams framework illustrates possibilities of how newly uncovered problems and politics could create new problem streams and new political streams as the MMC is being fully implemented (See Figure 1).

![Figure 1. MMC Model Applying the Multiple Streams Framework](image-url)
Research Design

A qualitative research design using descriptive case study methods was used in this study. I conducted an in-depth empirical study of a single event/entity within a bounded space (Creswell, 2005). More specifically, I investigated a contemporary phenomenon of educational reform in Michigan within its real context. The goal of this field-oriented research was to provide rich descriptions of the data from the focus groups to understand the setting, actors, event, and the process (Miles & Huberman, 1994).

Descriptive designs are used when the research looks to “document an event, situation, or circumstance of interest” (Fraenket & Wallen, 2003, p. 464). Qualitative methods are also used when the purpose of the research is to develop “a detailed understanding of a central phenomenon” (Creswell, 2005, p. 45). In sum, this research study seeks to understand participant perceptions of the MMC, dual enrollment, and the impact of the MMC on CTE. Information was obtained from participants regarding their perceptions of politics and problems that have developed since the MMC was mandated as an educational reform policy.

Appropriateness of Qualitative Design

A qualitative case study was used to explain issues related to CTE, the MMC, and dual enrollment. The qualitative research paradigm is favorable, as it relies on perceptions of people involved in the phenomena being studied, and it obtains data by asking general questions about the topic (Creswell, 2005). Hence, interviews are the key to corroborating data with observations and document analysis of materials related to adoption of the MMC in 2006.
Therefore, a qualitative research design examined the phenomena under investigation using focus group interviews at a southeastern Michigan high school. The study included a sample of 31 individuals in six focus groups. A qualitative study that uses focus groups as a means of data collecting should have between four and six focus groups, with each group including four to six members (Newman, 2003). This allows each member the opportunity to participate and contribute to the research.

The intent of this research was to gather information from the CTE teachers, CTE students, parents, dual enrollment students, and administrators regarding their perceptions of the impact of the MMC and dual enrollment on CTE. The evidence that was collected from the participants enabled me to develop themes related to the research questions (Gillham, 2000).

The qualitative data for this research project were collected from focus groups because the intent was to examine CTE teachers, CTE students, dual enrollment students, and administrators’ perceptions related to the impact the MMC has had on CTE. Focus groups are considered as one specific type of group interview. In this approach, the emphasis is on which forms of group interviews are or are not focus groups. Morgan (1997) preferred a more inclusive approach that broadly defines focus groups as a research technique through which data are collected through group interactions on a topic determined by the researcher.

For this research study, the qualitative methodology used focus group meetings based on the model created by Krueger and Cosey (2000). There were six focus groups, with four to six participants in each group: two student focus groups, one group of CTE students, and another student group included dual enrollment students. CTE teachers
comprised a group, and administrators formed a group. The final two groups consisted of one of parents and one that included members from each of the aforementioned groups.

Each of the focus groups was audio recorded and transcribed for data analysis.

The focus group interviews involved issues of carrying out research with individuals in cross-cultural arenas. The student body in the high school is unique, made up largely of Arab-American students. I was aware of many of the cultural differences in conducting the research at the high school, as I have several years of experience in working at the high school and dealing with the cultural issues firsthand. I also continue to interact with students, parents, and faculty members in my current role as principal and CTE administrator. I have been immersed in the Arab-American culture for the past 10 years. Thus, I feel that I have an in-depth understanding of the cultural groups of students, parents, teachers, and faculty at the participating Michigan high school.

Liamputtong (2008) noted that cultural sensitivity is an important issue in conducting research with people from different cultures and defined cultural sensitivity as knowing the cultural context of the group with whom the researchers wish to work. She also stated that a researcher demonstrates cultural sensitivity and competence through knowing the stakeholders and by knowing their key values.

Colucci (2008), cited in Liamputtong’s (2008) book entitled Doing Cross-Cultural Research, offered suggestions and recommendations about using focus groups with culturally diverse groups. Colucci noted that to conduct focus groups effectively, one needs to effectively plan, conduct the interviews, and analyze and report the findings.

I believed that focus groups were a valid research method for this study. However, I was well aware of the possibility of having to adapt the focus groups to the
specific predominantly Arab-American, Muslim population that I would be interviewing. I arranged to have someone available to translate the interviews if necessary. I was especially concerned about language being an issue with members of the parent focus group. I carefully planned the focus group discussion guides prior to the interviews to address potential issues that might arise regarding educational level, familiarity with the topic and research method, religion, and gender. I shared the focus group discussion guides with the high school liaison to get a second opinion about the questions that might be culturally sensitive to participants. I was also very careful not to stereotype individuals or groups of individuals during the interview process. I feel that this background work helped me to minimize my research bias. My goal was to make the entire focus group interview experience enjoyable and respectful.

In the analyzing and reporting phases after the focus group interviews were conducted, I was prepared with good problem-solving skills. I was also prepared to think creatively. Colucci (2008) suggested using humor during the focus group interview process in ethno cultural focus group research. I found that using laughter and humor where appropriate was very effective in gaining the trust of the cross-cultural participants in the research study. The use of humor where appropriate helped to break the ice and set the stage in the focus group interviews with members of the Arab-American community to promote trust and open and honest discussion.

It was important to me to establish the four necessary criteria for quality qualitative inquiry: credibility, trustworthiness, transferability, dependability, and conformability. The criteria were used to account for the potential of changing conditions in the phenomenon for study (Lincoln & Guba, 1985). I was careful to ensure that the
findings from this research study were credible and trustworthy. I sought to study this phenomenon from more than one standpoint. I studied various stakeholder groups with the intent of understanding the meaning of what they said. I also attempted to capture the stories that participants revealed in the focus group interviews. Credibility, transferability, and dependability of the data were established, because I or another researcher could expect to find the same or similar results when replicating this study.

Using appropriate research methods, I employed selection criteria for each of the participants chosen for this research study. Generalizations or transferability of the conclusions to other populations at other times and places will not be applicable. This qualitative study had the appropriate type of internal meaning based on the data collected from the focus groups, the themes that emerged, and the final interpretations and recommendations, which are suggested from the findings.

**Bounded Case Study (Theoretical Framework)**

Creswell (2005) defined a case study as an exploration of a bounded system or a case (or multiple cases) over time though detailed in-depth data collection involving multiple sources of information rich in context. According to Creswell, the bounded system is bounded by time and place, as is the case being studied: a program, an event, an activity, or individuals. A bounded case study is justified for this research study because it serves to explore the perceptions of teachers, parents, students, and faculty members at a southeastern Michigan high school with regard to the effect of the MMC on student performance and outcomes. This bounded case study will attempt to determine how and why the MMC has affected students’ performance and outcomes at the high school. Furthermore, a bounded case study is the framework that examined stakeholder’s
perceptions to determine how and why the MMC, as an educational reform policy, affects CTE and dual enrollment at the high school. A bounded case study framework is also appropriate for this research study because, as the investigator, I have little or no control of the MMC and dual enrollment. Finally, a bounded case study is justified as the MMC, dual enrollment, and the possible impact on CTE in the high school is a contemporary phenomenon within a real-life context.

**Focus Group Use**

Focus groups were the chosen as the approach for the collection of qualitative data for this research project because the intent was to examine students’, parents’, and faculty perceptions related to the impact that the MMC and dual enrollment has had on CTE. The focus group format was used because my goal was to talk to individuals who had common experiences centered on dual enrollment, politics, the MMC, and CTE. This format was the perfect method to gather information from participants about their experiences. These group interviews were appropriate for organized discussion on the topic of the MMC, dual enrollment, CTE, and politics at the high school. The group involvement in the focus groups stimulated group discussion and group interactions appeared to trigger thoughts and ideas among the participants many times. The focus groups were held at the southeastern Michigan high school in a nurturing and familiar environment for the participants. The participants appeared comfortable in disclosing their views, whereas, on many occasions, being influenced by their interactions with others in the group.
The Role of the Qualitative Researcher

I brought many years of experience to the research project. I have over 20 years of experience in education and in business and industry: ten years in sales and marketing, and nine years as a marketing education teacher coordinator. I was also a comprehensive high school assistant principal for three years and a CTE principal and a school district CTE director for eight years in a large southeastern Michigan high school. I was the first African-American building administrator hired in the southeastern Michigan school district.

I am a female as was well as a member of a minority ethnic/racial group. The racial/ethnic make-up of the large southeastern Michigan high school is mainly Arab-American; approximately 98% of the students are from the Middle East. The school also has a slighter higher number of males enrolled than the typical comprehensive high school. Total school enrollment as of the fall pupil count is 2344 students (females n=1103 and males n=1241; Zangle, 2010).

In qualitative research, Hatch (2002) defined reflexivity as the understood act of studying a social phenomenon. Researchers are a part of the world they study; the knower and the known are taken to be inseparable. Being reflexive places qualitative researchers in a distinctly different position from that of an objective scientist, who may be involved in more traditional quantitative research approaches. Creswell (2005) stated that reflexivity means that the researchers reflect on their own biases, values, and assumptions and actively write them into their research. This reflection may include topics such as discussing personal experiences and identifying how I collaborated with participants during specific phases of their project. It also could involve discussing how the
researcher’s experiences and cultural backgrounds affect the interpretations and conclusions drawn in the study.

In qualitative research, the role of the researcher is similar to a filter through which data are collected, organized, and interpreted. Looking for objectivity in qualitative research is not only foolish, it is impossible. Therefore, qualitative researchers should not strive to be objective but should look for ways to address bias. The researcher should face directly the subjective nature of his or her role. The qualitative researcher should consider the effects of personal biases on the research process as well as on themselves, data, methods, and analyses.

Qualitative researchers involve themselves in many aspects of their work. Through the researcher’s eyes, meaning is brought to the words, images, and interpretations. Lichtman (2006) discussed the importance of the researcher in all forms of qualitative research. He stated,

Because it is the researcher who is the conduit through which all information flows, we need to recognize that the researcher shapes the research. As a dynamic force, she constantly adapts and modifies her position with regard to the research topic formulation of research questions, and data interpretation. (p. 206)

Reflexivity has many meanings but usually is associated with critical reflection on the practice and process of research along with the role of the researcher. This process acknowledges mutual relationships between the researcher and the participants in qualitative analysis to be able to sort through biases and consider how their biases could affect various aspects of the research, especially when interpreting meanings. Creswell’s
view (2005) reflected this concept. He suggested that the researcher should actively write personal experiences into the study and how the researcher’s experiences in collaborating with participants and in discussing how their personal experiences and cultural backgrounds affect the study’s interpretation and conclusions. The qualitative researcher should be aware of how his/her history shapes a study. As the researcher in this study, I am aware of the research questions and have firsthand experience with issues associated with dual enrollment, the MMC, and CTE. This firsthand experience was used in a positive manner in examining the topic, addressing the research questions, and interpreting the data. My experience in these areas was not used in ways that could negatively affect the interpretation and conclusions drawn from the study.

The following is an account of my story of reflection and discovery as I interacted with the various stakeholder groups as study participants and interpreted their voices and experiences. In anticipating the interviews with CTE teachers, students, parents, and administrators at the southeastern Michigan high school, I was cognizant of the fact that I was perceived as the CTE authority figure in the school district. I wanted that recognition to be favorable as opposed to making a negative impact on the study. I felt that I could accomplish this by capitalizing on the fact that I was very well received as an administrator at the high school. I attempted to be honest, fair, and approachable with the teachers, students, and parents. I wanted all of the stakeholder group members to perceive me as an insider and to feel that what I was trying to accomplish was worthwhile. My anxieties were minimized somewhat by knowing that the individuals whom I would be interviewing had been informed of the purpose of the study, and they had verbally consented to take part. Still, when meeting with many of the focus group members for the
first time, I felt apprehensive about their responses to me and about their cooperation in this research process. With the teachers and administrators, I felt less apprehension, but my hopes were high that they would be open, honest, and frank in the responses given.

The focus group guide contained questions that could be considered sensitive for some individuals to answer in a group setting, particularly, the questions related to politics at the local level. Therefore, I knew that it was critical to engage participants from the beginning and develop rapport, and I needed a number of strategies to promote the stakeholders’ acceptance of my presence and my purpose. I dressed as I normally do, but not in my normal blazer or suit jacket. I chose to wear a blouse, a sweater and slacks. I initiated casual conversation on meeting with each group and interacted with the students’ and the adults’ focus groups in an age-appropriate manner. Then, explaining the study and its purpose, I emphasized the importance of understating the participants’ concerns and perspectives about issues involved with the MMC reform policy, CTE, and dual enrollment at the high school. I chose words that I thought would be understood by the stakeholder group members and to which they could relate, so as not to distance them through inappropriate language.

At the beginning of each interview, focus group members were asked to introduce themselves, to share a hobby that they enjoyed, or tell the group about things they enjoyed doing outside of school or work. For the most part, participants readily entered into dialogue with me, demonstrated a relaxed posture, and shared personal information. This suggested that they felt comfortable with the focus group interview process and me. I also felt at ease and became fascinated with the individual responses, thereby enhancing the quality of the data collected.
As the stories unfolded, I experienced a variety of unanticipated feelings: excitement for the challenging experiences that the student participants were having in their high school and college classes, empathy for the losses that many of the CTE teachers have suffered due to declining class enrollments, and hope that the support of the new leadership at the high school will help in bringing many of the CTE classes and programs back to the school. Parents revealed their frustrations as well as their contentment with the children’s experiences in CTE, dual enrollment, and with the MMC.

I experienced a variety of emotions during the interactions. However, I was careful to maintain a neutral attitude about what the focus group members told me. I was particularly struck by the frustrations that teachers and administrators had with compromises they had to make and with the overall politics centered on the MMC policy mandates. On the other hand, I knew that rather than have my own perspectives frame the subsequent discussion, it was important to focus on the research goal and to discover what meaning participants assigned to their experiences. As discussion ensued in each group, I began to understand how the MMC has affected them as individuals, teachers, parents, administrators, and students.

All of the focus groups appeared to accept my presence and purpose. I could relate to many of the participants’ stories, as I was not that far removed from their reality and experiences. I have not been an administrator at the participating high school for more than eight years now. However, my current administrative roles and the personal contacts and relationships that I still maintain at the school keep me connected. Only one student in the Technetronics group was apprehensive about answering questions in the
beginning. Members of the Technetronics group encouraged her to relax after the informed consent forms were read and shared with the students. She seemed to calm down and participate in the discussion after she was reassured by her fellow students.

Many of the feelings that I experienced during the interviews brought my role as a researcher into focus. Although the respondents rarely asked my opinion for direct advice, two parents asked for assistance regarding their children. One parent wanted help with paying for the credit recovery classes for her son. Another parent, whose son was struggling, requested help to assist her son in passing the MMC core classes. I wanted to offer assistance, and I offered it after the interviews concluded. During the interviews I felt obligated to maintain my researcher role.

In summary, I have taken a hands-on, approachable stance that has given me a reputation of being honest and trustworthy. I have approached the topic and the goals of the research project in a way that the individuals involved in the focus groups interviews were open and honest in their responses. I bracketed my biases (Hatch, 2002), kept track of my influences on the high school, the district, and setting, and monitored my personal and emotional responses. These reflexive activities allowed me to get close enough to the participants to understand what was happening.

Although I share similar experiences with many of the participants in the study (students, parents, and several faculty members) by being from a minority racial/ethnic and gender group, religion was a major difference between many of the participants and me. I am a Christian, and the majority of the students, parents, and faculty members who were involved in the research study are Muslim. The religious differences are related to customs, beliefs, and traditions. However, the adults and students at the high school and
in the school district respect each other’s differences. Diversity workshops were recently conducted in the school district with administrators, staff, and students. Survey results revealed that students and faculty members who are Christians accept the beliefs, customs, and traditions of the Muslims. Muslims students and faculty members accept the beliefs, customs, and traditions of the Christians. The awareness of the differences appears to work well for members of the school and the community (David, 2006).

Arway (1998) reflected on her struggle with qualitative research when she commented on self-disclosure and vulnerability in a narrative research project. Researcher self-disclosure, when carefully and appropriately offered, initiates authentic dialogue and is a way of sharing information regarding the researcher, exposing beliefs and feelings, and contributing to the construction of the research narrative. Therefore, the researcher is the instrument through which all meaning is derived in qualitative research. The researcher designs, develops, and collects the research and is shaped by it. Rather than look at possible researcher bias as a problem, drawback, or limitation, the researcher should be looked at as an asset. Reinharz (1992) stated that “researchers who self-disclose are reformulating the researcher’s role in a way that reduces engagement of the self but also increases the researcher’s vulnerability to criticism, both for what is revealed and for the very act of self-disclosure” (p. 34).

In addition to being embedded on site, of being a principal, and having experiences with dual enrollment, CTE, and the MMC, I bring certain cultural, social, gender, class, and personal politics to the research. I, like all qualitative researchers, can be expected to shape the outcomes that emerge from the data. Qualitative researchers need to accept this condition as a part of the research process and be open about it. In the
end, self-disclosure and reflecting on self should help in interpreting the information. Modeling this reflexive behavior also helps in facilitating openness from respondents during the focus group interview process.

**Reflexivity**

Litchtman (2006) pointed to the view that not only do subjectivity and reflexivity exist in qualitative research, but that they should be there. I asked myself how my own background, concerns, and interests have affected this research project. I also questioned how someone else might have conducted this research. What types of questions might he or she have asked? How might he or she have interpreted the interviews? I wondered whether I have changed because of learning from the individuals in this study. Creswell (2005) pointed to the importance of clear critical reflexivity and subjectivity to the research process. This process requires that the researcher honestly and consistently discloses personal assumptions and biases that shape their inquiry (Creswell, 2005). My views regarding the MMC, dual enrollment and CTE, had to be constantly monitored as I conducted the research project. However, I realized that I was not a neutral tool in the research process.

I recognized that the focus group participants were demonstrative. The respondents were affected by the interpersonal dynamics that occurred during the focus group interview process. Social relationships developed during the focus group interview process, and we were working together as the social encounters were occurring. These types of interactions required me to be reflexive about the research experience and process. I realized that practicing reflexivity was a difficult and complex process. It was difficult to practice constant watchfulness and thoughtfulness while the interviews were
occurring. Reflexivity is a messy process. I found that I was experiencing various
emotions during and after conducting the research. I felt sadness at times, curiosity at
times, and even anger and shock. I was sad regarding the loss of CTE students, teachers,
and programs. I experienced anger that the former principal of the high school did not
support many of the CTE courses, the school store lab, and the students’ Career and
Technical Student Organizations. I was even shocked at the overwhelming support from
the focus group participants for the MMC mandate.

I kept a research journal that was separate from my field notes. I wrote my
reflections at the end of each focus group interview. My journal helped me to reflect on
how the participants reacted to me. In general, they reacted in a warm and open way.
How did I present myself? What was my body language? What was my appearance? I
tried to present myself as a member of the high school family at all times. I dressed in my
usual work attire for all of the focus group interviews (jacket, slacks, or skirt). Was
equality or hierarchy noted? My notes indicated that this was much more evident with the
student groups than with the adults. The journal also assisted me in reflecting upon the
interviews and the discussions. I was able to reflect on what was good or unsatisfactory
about my own behavior. How did I feel about my own performance? I was concerned
about being too authoritative or pushy. I was also concerned about listening well, and that
I asked the appropriate follow up questions. I felt confident that I understood what the
participants were trying to tell me. Finally, I felt that the focus group interviews were
generating reliable information. It did not appear that the participants were wary of my
questions.
Confidentiality and anonymity were very important aspects of this research project. I was very sensitive to information revealed about illegal activities, moral judgments about others, and gossip and hearsay about other people. These types of ethical and moral dilemmas were raised many times during the research process. I made an effort to react in a very ethical manner when this occurred. I presented the information following the guidelines that I revealed to the participants in the informed consent permissions.

**Reflexive screens.** It was important to me to be aware of my reflexivity throughout the focus group interview process. Reflexive screens are shields used during data analysis and reporting based on culture, age, gender, social status, education, family, political praxis, language or values (Patton, 2002). I was especially aware of certain reflexive screens that I needed to bring to the overall data analysis and final reporting of the findings and results of the study. Certain reflexive screens evolved as a natural part of the data analysis and the final reporting process. The focus groups themselves lead to natural reflexive screens.

The one exception was the Conclave group. Both student groups consisted of juniors and seniors from the high school. All of the students reflected the ethnic, social, and economic status, and religious makeup of the high school. They were Arab-American and they were Muslims. However, certain reflexive screens were related to the students regarding values, education, status, and family. Not all of the students in the Enthusiastic Technetronics group were from families whose members had attended college. A few of the students noted that some members of their families are medical professionals. However, students also talked about family members who encouraged them to work on
cars because the family member took vocational courses while in high school. Many of
the dynamics served as my reflexive screens as I was analyzing the data for my final
report.

The Masterful Maestros (teachers) and the Authority Figures (administrator)
group also initiated a different reflexive screening process. These groups were a more
heterogeneous mixture of cultural, political, and religious backgrounds. Both groups also
brought similar but also different values. None of the members of the Maestros or the
Authority Figures groups was new to the southeastern Michigan high school community.
They appeared to be comfortable with the school, the school culture, and seemed to have
a genuine concern for their students. The differences that they brought to their respective
focus groups enriched the data.

The Proactive Progenitor group also called for a different type of reflexive screen.
However, theirs were similar to the reflexive screens that were needed with the students
and with the faculty focus groups. The Progenitor group consisted of Arab-American
females, one Arab-American male, and one African-American female. There were
obvious differences in religion, culture, and values. However, it was soon evident that, in
a parent group, all members were long-term residents of the community and they
appeared to accept each other’s similarities as well as their differences. Again, this served
to enrich the data and added to the final reporting of the results of the study.

Finally, the Conclave group needed a reflexive screen that addressed all of the
aforementioned qualities. Members of this group were called the Reluctant Conclave
Group because it was obvious that they were not as comfortable with the focus group
process from the start as were the other groups. I felt most of this was because they were
not as homogeneous as the other focus groups. This reflexive screen was important, and, like in the other groups, it served to enrich the final reporting of findings and results.

**Self-description.** Before beginning, I gave careful consideration to how I would present myself to the focus groups. I wanted to be viewed favorably, so I attempted to create a context conducive to rich interaction. I positioned myself as a learner. I spoke foremost about being a doctoral student and talked about the value of participants’ expert knowledge to enrich my learning about the impact of the MMC on CTE and dual enrollment in the high school. However, I also wanted to make them aware that I am a CTE professional, and that my research is targeted for fellow CTE professionals in order to provide insight and perspective into the 21st century morphology from vocational education to current career and technical education.

The way in which I presented myself to the participants likely contributed to my success in gaining entry and engaging them in the research process. I also expected that my gender and my prior administrative role at the high school enhanced the participants’ comfort level and the quality of the interaction.

I was somewhat uncomfortable with the first focus groups. I felt that this was to be expected as a beginning qualitative researcher. I became more comfortable after the second interview as I became accustomed to the exchange between the focus group participants and myself. I found that the more I let go of being in charge, the group discussion evolved naturally. At this point, I began to share my insights and provide information on dual enrollment, CTE, and the MMC. The comments and insights came in the form of brief comments and anecdotes. However, I was careful not to impose my own personal meanings on the participants’ experiences. I assumed an attitude of wanting to
know more or understand the issue better from their perspectives. Still, I believe that the healthy exchange contributed to the depth and quality of the data that was collected.

I attempted to minimize my power established as the researcher in the beginning of the interview process. I established my authority in defining the problem, the nature of the research, and the boundaries that were being explored. I had given voice to the participants, but I also had control over the interpretive process and would assign meaning to the information that the focus group members shared with me.

I found analyzing the transcribed texts to be quite a challenge. I wanted to do justice to the narratives in my analysis. As noted by Creswell (2005), the challenge is for the researcher to preserve the participants’ meanings while being aware of how personal and professional meanings are reflected in the analysis. I was aware of how my personal and professional familiarity with the literature would influence my interpretation of the data. This experience and expertise not only gave me a background in relation to the MMC, dual enrollment, and CTE, but this insight enhanced my ability to make sense of the data. At the same time, I tried very hard not to let my prior experiences and knowledge hamper my creative thinking about data interpretation.

In reflecting on my interpretation of the themes, I came to understand how I influenced interpretation of data. Categories were identified to cluster the data that were captured. I continued to analyze the transcripts for clues to a concept or main theme. Frequent comments, such as “students are dual enrolling that have a 1.2 GPA,” “they are taking college courses to sleep in or go home early.” I became aware that communication and transparency regarding dual enrollment would be one of the themes. As I continued
the process of making meaning of the texts, I realized that my beliefs, the data collected, and its interpretation was becoming a see-through process.

Finally, I was an inherent influence on the interpretive process. The meaning I brought to the data was supported by text. However, my familiarity with the research in this subject matter strengthened my sensitivity to the participants. This sensitivity deepened my understanding and enhanced the creation of meaning. Locating self in the research endeavor did not lessen the creditability of self in the research in any way. Rather, it made my research more explicit as to how the stories are contextually bounded, strengthening my integrity as the researcher.

Setting and Context

The southeastern Michigan high school is located in the Detroit, Michigan, metropolitan area of Wayne County. The city in which the high school is located is the tenth largest city in the State of Michigan, with a population of 98,153 people according to the 2010 census. The city has a satellite campus of a major Michigan educational institution located within its city limits and is the home of a large community college, which is referred to in this research study as the college. Many of the students at the high school participate in dual enrollment at the local community college.

The school district in which the participating high school is located comprises 34 schools, which include three comprehensive high schools, a career center, a math and science technology center and an early college high school. The comprehensive high school that is the focus of this research study has approximately 2,500 students, the majority (approximately 98%) of which are of Arab-American descent. Sixty percent of the students at the high school qualify for free and reduced lunch. The majority of these
students are also Muslims. The school has a large bilingual population. However, many of the students are the second generation to attend the large high school.

Ground was broken for the high school in 1926 at a cost of $2.2 million. It was inspired by buildings such as the University of Michigan Law School in Ann Arbor, Michigan, as well as by buildings in England. The exterior of the school is made of granite and sandstone. The media center has hand-carved paneling, a fireplace, painted wall murals, oak furnishings, and many bronze and marble statues including Athena, Apollo, Nike, Venus, and Mercury. The school was renovated in 2005 and in 2007. A cafeteria, ten classrooms, and science and computer labs were added during the 2005 renovation. Administrators and school personnel carefully preserved the structure and appearance of the school by using the alternating dark and light limestone scheme and protected the architectural model of the school’s inception. The renovations in 2007 involved the athletic facilities wherein the football field was replaced with Astroturf, and the track and tennis courts were also replaced.

The faculty and staff at the high school are approximately 40% Arab-American and 60% Caucasian. The Arab-American staff members are predominantly Muslim, and the Caucasian staff members are predominantly Christian. The number of Arab-American staff members continues to grow at the school. Ten years ago, the staff racial/ethnic makeup was approximately 25% Arab-American and 75% Caucasian. The staff maintains a good rapport with the students, parents, and the community members.

Currently there is much excitement about the appointment of a new principal to replace the former principal who recently retired. Many individuals, across stakeholder groups, feel that the new principal brings a new perspective to the school, one that is
believed to be more realistic regarding all students being successful in meeting their goals. The “we are a family” atmosphere has been maintained over the years. The majority of the faculty members appear to enjoy working at the high school campus. The students and staff also take a lot of pride in their school.

The high school has many traditions. Every class that graduates gives the school a gift. A 1950s graduating class presented seventy-six flags representing the members of the United Nations. The flags have been used at every graduation since then, with many other flags being donated over the years. Football has been a strong tradition at the school; the school has won four state football championships. The participating high school is the rival of the two other district high schools. There has also been a longtime rivalry with several surrounding high schools in the area.

The comprehensive high school is located in what has been called America’s Muslim capital, a Detroit suburb that gradually gives way to busy streets that have mosques and thriving small businesses. There are signs in Arabic advertising the services of local attorneys and physicians. People speak Arabic in the streets, and many sidewalks in the community are filled with Arabic women who wear colorful hijab headscarves.

The community is a microcosm of the Middle East in the Midwestern United States. Roughly 40,000 of the city’s 100,000 residents are Arab-American. The southeastern Michigan high school is located in the largest Arab community outside the Middle East, where more than 30% of the residents are of Arab ancestry. The community’s growing Muslim population consists of a wide range of individuals, from educated professionals to local small business owners. The community consists of every Arab nationality and religious sect, from Yemeni traditionalism to secular modernity. The
south end and the east end of the community is a bustling Lebanese community consisting of Arab restaurants, bakeries, and halal meat markets. The city remains quite segregated as the many of the Arab-Americans continue to reside in the east and south ends of the community. The Arab-American presence in the west side of the community is less prominent, however, as the west end of the city remains populated by Italian and Polish ethnics. This east and south side Arab presence is reflected in the student population in the district’s schools.

The Muslim presence in the southeastern Michigan city dates back to the early 20th century, when men from Lebanon migrated to the area to take advantage of the generous five-dollar wages offered by the Ford Motor Company. The immigration from the Middle East led to the second largest concentration of both Arabs and Muslims outside the Middle East, behind only Paris, France. There are 32,000 Arab Muslims from Lebanon, Yemen, and Iraq living in the eastern end of the city. The Islamic Centre of America, a Shi’a mosque, frequented by mostly Lebanese Muslims, is the largest mosque in the United States. Mosques and Islamic centers play an important role in the lives of students at the high school. The mosques are places of refuge and rest. The mosques are also places where members of the Muslim religion can learn more about Islam. Local Muslims have stated that they feel safer and more relaxed in the centers, which are said to be isolated from many outside influences. One can often hear the call to prayer publicly on loudspeakers near several of the local mosques in the community.

The school district where the high school is located has made accommodations for their Muslim students. The school district is closed on several of the Muslim religious holidays such as Eid and Eid Mubarak. Accommodations are also made during Ramadan.
The cafeteria is virtually closed, and times for sports practices are changed, if necessary, to accommodate students’ fasting. Pork has been banned from school lunches to accommodate Muslim dietary guidelines. Halal food is provided in all of the public schools. In addition, pressure ensued from the school board, parents, and federal and state governments to provide more accommodations to Muslim students in the school district. Parental advocacy forced the separation of gym classes by gender in one of the district’s schools. The office of civil rights has been responsible for the expansion of bilingual instruction for many Arabic-speaking students in the school district.

The current political climate in the school district is less focused on issues such as civil rights and more focused on budget cuts and the economy in Michigan. The negotiating of teacher, administrator, and support personnel contracts has set the stage for a highly emotional political climate in the school district. The teachers’ union recently settled their contract after two years. Administrators are currently negotiating a contract. The administrator negotiations appear to be following the same path that the teachers’ union followed. Negotiations are currently in a fact-finding status. These negotiations have led to stronger bonds between the teacher and administrator unions and larger disconnects between these groups and the superintendent and members of his cabinet.

**Sampling and Data Collection**

Morgan (1997) described four types of analysis for focus groups: transcript-based, tape-based, note-based, and memory-based. The data collection method for this research study was transcription with audiotape-based recordings to verify the information collected. Included in the research study are CTE teachers in state-approved CTE programs in a high school in southeastern Michigan and CTE students enrolled in at least
one state-approved CTE program. Additionally, the targeted participants included dual enrollment students who have taken at least one dual enrollment class, parents of students who have taken at least one dual enrollment class and/or parents of students enrolled in at least one state-approved CTE program, and administrators at the high school.

For this research project, a purposive sample was selected from homogeneous populations. Homogeneous sampling is purposeful in selecting participants from a group that contains specific characteristics and comparable traits (Creswell, 2005). Purposive sampling includes participants who have an understanding of the phenomenon being studied and who are theoretically motivated (Creswell, 2005). The CTE teachers, CTE students, dual enrollment students, and administrators were from homogenous populations. Morgan (1997) recommended that participants in focus groups share common characteristics, such as demographics or experiences.

Participants were selected in several steps. The first step was to contact the principal for permission to conduct the study at his or her building. The next step was to contact the teachers and the administrators, which was done through emailed letters that included informed consent forms. Documents were reviewed (Zangle [2010] and the CTE 4483 [2008] report) to determine students who were eligible to be considered as CTE, dual enrollment, and/ or CTE and dual enrollment students. Additionally, students and parents were contacted and given informed consent forms.

The study included a sample of 31 individuals in six focus groups. A qualitative study that uses focus groups as a means of data collecting should have between four and six focus groups, with each group including four to six members (Newman, 2003). This
focus group composition allows each member the opportunity to participate and contribute to the research.

According to Labuschagne (2003), data collection in qualitative studies normally uses three formats: (a) open-ended interviews, (b) direct observations, and (c) written documents. As researcher, I conducted focus groups following a standard open-ended interview model, and acted as the moderator for each focus group. The moderator’s role was to introduce the topic, explain the purpose of the study, provide directions, and guide the discussion (Morgan, 1997). Using the same moderator for all groups provided consistency. I read the questions to the participants and facilitated the discussion in all of the focus groups. Each session was tape-recorded, and I transcribed the tapes to insure confidentiality. The audiotapes were reviewed and compared to the transcribed copies. The transcripts and field notes will be maintained in a secure area for four years.

**Demographic data.** Six focus groups were conducted at the large southeastern Michigan high school. The information was collected over a three-week period from January 31, 2011, to February 18, 2011. The first focus group consisted of CTE teachers of state-approved CTE programs in the participating high school. I named this group *Masterful Maestros*. All participants in this group were veteran CTE teachers. They all were considered master teachers, and none was new to the school. The Maestros appeared very comfortable in their role as teachers, and they shared valuable information with the group. The second focus group, called *Student Scholars*, consisted of dual enrollment students who had taken at least one dual enrollment class at the local community college. Members of the third focus group, *Authority Figures*, were all assistant principals at the high school. These administrators were considered
disciplinarians and rule enforcers. CTE students enrolled in at least one state-approved program were participants in the fourth focus group, called *Enthusiastic Technetrionics*. Students in this group were very upbeat. Most of them were very excited about their CTE classes and the opportunities that the CTE courses have given them. Parents of students who were currently dual enrolled or had previously dual enrolled and/or parents of CTE students who were currently or had previously taken at least one state-approved CTE program were included in a focus group called *Proactive Progenitors*. The parents were called Proactive because they were all active in school issues and very passionate regarding their children. Finally, the last focus group was a combination of individuals from the aforementioned groups called the *Conclave* group. This group was less homogeneous than the others. Members of the group included the high school principal. This group was somewhat reluctant to share their insights at the beginning of the focus group discussion. However, focus group members were more open as the group interviews progressed.

The participants were sent informed consent forms (See Appendix B) and demographic surveys prior to the arranged focus group meeting times. Those who did not bring the signed informed consent forms to the focus group meeting were given a copy to sign and read prior to the focus group meeting beginning. Table 6 shows the numbers of participants in each focus group.
Table 6
Focus Group Participants at Southeastern Michigan High School

<table>
<thead>
<tr>
<th>Name of Group</th>
<th>Description of participants</th>
<th>Number of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masterful Maestros</td>
<td>Teachers</td>
<td>6</td>
</tr>
<tr>
<td>Student Scholars</td>
<td>Dual Enrollment Students</td>
<td>5</td>
</tr>
<tr>
<td>Enthusiastic Technetronics</td>
<td>CTE Students</td>
<td>4</td>
</tr>
<tr>
<td>Authority Figures</td>
<td>Administrators</td>
<td>4</td>
</tr>
<tr>
<td>Proactive Progenitors</td>
<td>Parents</td>
<td>5</td>
</tr>
<tr>
<td>Conclave</td>
<td>Combination – 7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Students</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Administrators</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Parents</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>CTE Teacher</td>
<td>1</td>
</tr>
<tr>
<td>Total Groups</td>
<td>6</td>
<td>31</td>
</tr>
</tbody>
</table>

Each focus group was read the questions from the focus group guide (See Appendix C). All of the focus groups followed the same format with the questions read to the participants and each member responding. The Maestros, Authority Figures, and Conclave focus groups lasted 60 minutes, whereas the Student Scholars (CTE Students), Technetronics (CTE Students) and Proactive Progenitors lasted 45 minutes.

Each focus group was coded by the order in which they were conducted and completed. Participants within each focus group were assigned a number that corresponded with their initial order of speaking in each focus group. Each participant was coded per group using a three-digit identifier. The first number represented the focus group, and the second and third digits represented the order in which the individuals first spoke in the group. For example, the respondent in the Masterful Maestro focus group
who answered the first question was labeled “R101” – R represents respondent, one indicated the specific focus group and 01 a sequential number.

The average age of the participants was 31.37 ($SD = 13.70$) years, with a range from 14 to 58 years. The race/ethnicity of the focus group participants was predominantly Arab-American. The Arab-Americans noted that they practice the Muslim faith. The other racial/ethnic groups noted that they were Christian. Twenty-one (68%) of the 31 participants indicated their ethnicity as Arab-American, with 9 (29%) Caucasian. One (3%) African-American was involved in the focus groups.

**Informed consent.** Obtaining consent from the participants was a necessary component of this study. Participants in the study needed to be assured that their responses to the focus group questions were confidential (Creswell, 2005). Each participant was asked to review and sign an informed consent form. The forms followed the format recommended by the Internal Review Board of Eastern Michigan University (See Appendix B).

**Confidentiality.** To protect the participants’ identities, a two-digit code was used. The two-digit sequential code was used as the participant number. The information was stored in an Excel file maintained on a password-protected computer. Following acceptance of the completed study, the Excel file will be erased from the computer’s hard drive, thus eliminating any connection between the code numbers and the names of the participants. The transcripts and the audiotapes will be stored in a locked cabinet. After four years, these hard copies will be destroyed to protect the participants’ identities.
**Data analysis.** In a qualitative study, the data analysis process relies more on the interactive process than on linear data analysis (Creswell, 2005). This process looks for patterns as a means of explaining the process being studied. Krueger and Casey (2000) stated that data analysis involves examining, categorizing, tabulating, or otherwise recombining the evidence to address the initial propositions of the study. I chose the qualitative research approach as the most desirable and most appropriate for this study. The basis for the analysis was the transcript-based focus group proceedings.

The data in this study were the audio recordings and transcriptions of focus group discussions. The analysis began with the identification of themes, which emerged from the transcribed data, and field notes written by me. Themes were then coded and categorized.

Neuman (2003) suggested that the coding process includes three phases: open, axial, and selective. Themes emerge in the open phase, where labels are assigned. Axial coding is the next step, involving the review of the initial codes and assigning categories. Selective coding results after the data are collected, major themes are identified, and cases are noted. Creswell (2003) recommended a process of coding that uses 30 to 40 codes; then the codes are consolidated into 20 codes. This process is repeated to remove any overlaps in the coding. The result was the identification of important themes from the interviews.

Triangulation of the data occurred from the individual evidence, types of data collected, and data collection methods (Creswell, 2003). I triangulated among different data sources in order to enhance the accuracy of the research study. Triangulation occurred by corroborating evidence from the different individuals being interviewed in
the focus groups (e.g., students, parents, and faculty members), type of data (e.g., focus
group interviews), and methods of data collection (e.g., enrollment data, course selection
sheets, and focus group interviews) in descriptions and as themes were identified. The
triangulation ensured that the study was accurate because the information drew on
multiple sources of individuals, information, or processes.

The Long-Table Approach (Krueger & Casey, 2000) was used as the data analysis
strategy. Several long tables were be used to help sort, code, and arrange the data
gathered from the focus groups. Each group’s responses to a question were compiled in a
descriptive summary. Careful attention was given to comparing and contrasting
individual and group responses. Similarities and differences were examined to establish
themes and patterns in the data. The descriptive summary described what was said,
interpretations, or recommendations. From the descriptive summary, emerging themes
were identified using specific quotes from the focus groups as evidence to capture the
essence of what was said during the meeting.

Coding was used to form the initial categories of information about CTE, dual
enrollment, the MMC, and problems, politics, and windows of opportunity for solution
streams that have or may evolve from the educational reform policy mandate. A
formative coding process emerged. Specific coding patterns were primarily organized
around the focus group guide questions. Questions from the focus group discussion guide
are listed below:

- Tell us who you are, what courses you are enrolled in, and what you enjoy
doing most when you are not in school?
• When I say the words dual enrollment, Career and Technical Education (CTE) and/or the Michigan Merit Curriculum (MMC), what experiences have you all had with these things? *[Are you familiar with dual enrollment, CTE and/or the MMC?]

• What has been your own personal story regarding CTE and/or dual enrollment in the last five years since the MMC has been implemented?

• How did you end up in the CTE and/or dual enrollment courses in which you are enrolled?

• Okay, we have talked about CTE, dual enrollment, and the MMC – how do you all feel that these things have prepared you for college, a career, or life beyond high school?

• Let’s discuss CTE, dual enrollment, and the MMC at the local level- I am interested in your feelings regarding compromises you have had to make and your awareness about the politics in Dearborn surrounding these things?

• If you had a chance to give advice to the Dearborn superintendent, the principal of this high school, or the local school board members regarding dual enrollment, the MMC, and/or CTE – what advice would you give?

• Of the topics discussed today, which one is most important to you (CTE, dual enrollment, the MMC, or other things)?

• Is there anything that we missed? Is there anything that you came wanting to say that you did not get a chance to say?

I began the coding process looking for patterns. I then created a code list utilizing the letters of the alphabet for each set of focus group questions. I named and categorized
the data from each focus group interview during the open coding phase. The data structured itself around several concepts or themes. Concepts or themes with similar properties were grouped together. The categories were arranged and rearranged until I was satisfied that the concepts were similar and that they belonged together in groups.

Six major categories emerged in the open coding process. The major themes or categories were named (1) Transparency and Communication for Dual Enrollment; (2) Loss of CTE and Elective Programs; (3) Acceptance of the Status Quo; (4) Need for Flexibility; and (5) Support for CTE, Jobs, and Careers. Once this was done, the dimensions or ranges of each category were examined. This was done to help me determine that categories were properly grouped together and saturated. This work of coding and categorizing was done alone. However, a research assistant who sat in on two of the focus group interviews reviewed the transcripts and field notes. I do not feel that the presence of the research assistant changed the group dynamics. The assistant was introduced as an assistant at the start of the interviews. He did not participate in the discussion at all. Reflecting on the transcripts and field notes of the interviews that included the assistant, I found that the participants appeared comfortable. The participants fully participated in the discussion in both of the groups. No team coding of the data occurred at any time, but I felt that reviewing the transcripts and field notes with a research assistant served to enrich the triangulation process.

Axial coding was the next step. Once the five themes were identified, I began to put the data back together to make connections between categories. Finally, I asked several participants to check the accuracy of the account from the focus group sessions, a process identified as member checking by (Creswell, 2005). More specifically, the
participants were asked whether the descriptions were realistic, if the emergent themes were accurate, and if my interpretations were fair and representative of the responses.

Participants were selected by reviewing the data in Zangle (2010) and the CTE 4483 report (2008). It was necessary for the students selected to be currently enrolled at the southeastern Michigan high school and to have also completed at least one CTE state-approved course and/or at least one dual enrollment course. Parents of the students were identified using Zangle and the CTE 4483 report (2008). Teacher selection was based on the state-approved CTE courses they taught in the 2010/2011 year, also using Zangle and the CTE 4483 reports. Building administrators were invited to participate in the focus group first. Based on their responses, district-level administrators were asked to participate until four to six administrators were identified to be included in the administrator group. A pool of names was established for each group. Names from each focus group were pulled from a hat at random, and each participant was asked to participate until a pool of four to six participants for each focus group was identified.

On the basis of Zangle and CTE 4483 reports, the following CTE state-approved classes/programs included (a) advanced automotive technology programs, (b) machine tool/manufacturing technology programs, (c) accounting, and (d) personal finance. The total enrollment consisted of 80 students: 20 females and 60 males. CTE dual enrollment classes included (a) college health, (b) college industrial technology, and (c) college business. The total enrollment consisted of 49 students: 45 females and 4 males. The parent group consisted of 80 parents from the CTE pool: 49 parents from the CTE/dual enrollment pool and 49 from the dual enrollment pool. The total pool for the parent group was 153.
The administrators’ pool of seven consisted of four assistant principals, one principal, and two coordinators: three females and four males. Finally, the dual enrollment classes’ pool consisted of classes in college English and college history. The total pool for this group comprised 49 students: 29 females and 20 males.

Contextual factors regarding race/ethnicity, gender, and SES possibly influenced the research. The students at the participating high school are predominantly Arab-American (98%). Sixty percent of the students receive free and reduced lunch. Twenty-one (68%) of the 31 focus group participants indicated their ethnicity was Arab-American, with 9 (29%) being Caucasian. One (3%) African-American was involved in the focus groups.

The general nature of enrollment in certain CTE courses also can affect the gender composition in those courses. Historically, auto technology courses are more heavily populated with male students, whereas courses such as medical assisting have a greater number of female students. This pattern was followed in this research study. Eleven students participated in the study: 7 males and 4 females.

**Credibility and trustworthiness.** Data credibility is determined by the research methodology used. Credibility and trustworthiness will vary based on whether the research is qualitative or quantitative. Winters (2000) explained that external credibility is not a necessary component of qualitative research. Quantitative research relies on quantifiable data for validity, whereas qualitative research data relies on the representation of the participants as well as the appropriate research methods. External validity in quantitative research relies on the ability to generalize conclusions to other
populations at other times and in other places. In contrast, qualitative research is more concerned with the internal meaning of the story to a person or group.

Qualitative researchers generally do not convert their data into numerical form but are careful to assure that their findings are valid and reliable. For qualitative researchers, credibility means that the concepts that they are examining are those intended, not confounded or overlapping with other concepts not intended to be included (Ellis & Ellingson, 2007). Trustworthiness is established when researchers find, or could expect to find, the same or similar results when replicating the study. Throughout the data collection process, I worked to ensure that the findings and interpretations were accurate. The credibility of the research study’s findings was enhanced by authenticity and trustworthiness that was validated through the processes of triangulation and member checking.

The appropriate research methods were selected for this research study. A qualitative study was determined to be appropriate to gather meaning based on the data collected from the focus groups. The participants were selected carefully on the basis of selection criteria. Generalizations based on the conclusions to other populations at other times and places were not applicable. Finally, maintaining meticulous records of all sources of information collected also enhanced the internal credibility. Keeping detailed transcripts, taking field notes at all focus group interviews, and using reflective thinking activities during the research process helped strengthen the internal creditability of this research project.
Summary

A qualitative case study research design was used in this study, using focus groups of students, parents, teachers, and key administrators to address the research questions developed for the study. Each focus group was asked the same set of open-ended questions to collect data on the impact of the MMC on CTE and dual enrollment in a southeastern Michigan high school.

Results of the findings from the focus groups are detailed in Chapter 4. Enrollment data were used to look at enrollment trends in state-approved and non-state-approved CTE courses. Enrollment data were also examined for the dual enrollment programs in the selected Michigan high school. Results of the qualitative analyses for each research question are presented in Chapter 4.
Chapter 4: Findings

Introduction

The purpose of this qualitative bounded case study was to examine the degree to which the Michigan Merit Curriculum (MMC), as educational reform policy, exerts influence on CTE and dual enrollment in the southeastern Michigan high school selected for this study. Additionally, this study explored student, faculty, and administrator perceptions of the MMC on student performance and outcomes (e.g., course selection, perceptions of rigor, and post-secondary credit earned). The study also examined the participants’ perceptions regarding the problems and politics that emerged from the MMC as the solution to high school reform and increased rigor at the high school. This chapter is divided into the following major sections, including (a) the introduction (b) summary of focus group discussion, (c) politics, (d) emergent themes, (e) aggregate summary and analysis, (f) sensitivities and disconfirming evidence, and (g) CTE and dual enrollment course selection data.

Summary of Focus Group Discussion

This study identified student, teacher, parent, and administrator perceptions of the MMC as an educational reform policy and any influences it had on CTE and dual enrollment in the selected southeastern Michigan high school. Participants’ perceptions regarding the politics related to the MMC were also explored. The study followed a qualitative methodology and gathered data through focus group interviews. Kruger (1994) insisted that focus groups are reliable and valid in providing conclusions and data regarding perceptions and insights.
Focus groups were aimed not to infer but to understand, not to generalize but to
determine the range, not to make a statement about the population but to provide
insights into how people perceive a situation (p. 3).

A summary of the focus groups interviews follows. Alongside the summary of
focus group findings I will interject meaning drawn from the participants on the basis of
their experiences. This multilevel analysis is based on their personal, professional,
cultural, and family experiences. The description of what occurred in the focus group
discussions will later lead to a description of the recurring themes.

**Masterful Maestros (Teachers)**

The Masterful Maestro focus group discussion began with each teacher discussing
the courses that they taught and what they enjoyed doing outside of work. There were
three business teachers in the group and three teachers from the industrial technology
classes. They revealed golf, coaching football, swimming, and boating as hobbies. One
teacher noted that she has two children under the age of five, and that does not allow her
to have time for much of anything. Focus group members were honest, open, and frank
from the beginning to the end of the interview. Focus group members were encouraged to
discuss tangential issues during the interviews. This made the discussion richer in many
cases, and also promoted a deeper understanding and discussion of the questions that
were posed to the group members from the focus group discussion guides.

Members of this group discussed their experiences with CTE, dual enrollment,
and the Michigan Merit Curriculum (MMC). “We got duped. With the Michigan Merit
Curriculum, our classes have gone down. There’s no room for CTE classes in the kids’
schedules anymore” (R101). The Maestro respondent stated, “They’re here to get their
requirements. They’re coming from overseas and they’re already behind because of the language barrier, so they don’t have any room in their schedule for CTE ‘cause they’re trying to make up two and three other core classes” (R101).

The discussion continued with two other comments from Maestro group members regarding the decline in CTE enrollment due to the MMC mandate. Another Maestro respondent noted the steep decline in CTE enrollment at the high school due to the mandated MMC. “I remember the meeting I had with school administrators four years ago. We had a great marketing program at this school. We had DECA kicking butt. It was awesome. I looked forward to coming here to teach. Then everything got axed. It’s like, well, no more marketing. They gave me a computer class. I am a marketing person. Throw me in a computer class, I can teach it, but I’m not great there, like in the marketing classes” (R106). The second comment from a Maestro focus group participant noted that CTE classes have been affected by the MMC and by dual enrollment. A Maestro focus group member stated, “I’ve been here ten years. When I got here there were seven of us down at that end of the building. Not counting the business classes, it is three of us” (R104). A different member added, “I have been in the business department longer than that; there were 10 or 12 of us there, now there is 3.5” (R103). Another focus group member added, “There were 13 when I started” (R102). Based on these comments it is evident that experienced CTE teachers are keenly aware of the MMC’s impact on CTE programs. They also appear to be aware of the perception that CTE and other elective classes are not as important today due to the MMC mandate.

All six of the Maestro group members noted concerns regarding dual enrollment. “I think that the dual enrollment requirements need to be looked at. Dual enrollment
should be something for kids that are actually gonna go to college and kids that are doing well. Kids that actually can take the class in school should be the ones that are eligible to take those classes” (R104). “So they get out of school two hours early or they don’t even go to school. They just go home or do whatever they want, and I don’t think that’s right” (R103). “I think it should be reserved for kids that actually deserve it. I don’t think it should be – you’ve got to prove your worth at that high school before you get into college” (R105). “It’s a privilege more than just something that we’re looking to give to, really, anybody” (R106). “You have students in high school having a GPA of 1.2, taking college level classes. They are struggling in high school and are in dual enrollment – does not make sense, does not make sense” (R102). “They should be accountable. If they’re failing the college class then they should be required to pay it back” (R101). Maestro group respondents were very passionate about their concerns regarding dual enrollment. The teachers appeared not to be just concerned about protecting their jobs as elective teachers. They appeared to have genuine concern for what is best for students at the high school.

Maestro group members noted that the local college is not happy with the large number of students from the high school who are enrolled in their classes. Teachers stated that rumors are that the college curriculum is being dummed down to accommodate some of the high school students. “I don’t think the college is really happy about all of our students over there. I know not. It’s definitely a double-edged sword for them. Especially now, because I think they even have to dumb down their curriculum to get – to get the kids to pass. And then, what’s the point? What’s the whole point of that?” (R101). One Maestro member stated that the college does not need the high school
students as much anymore. They noted that their classes are full due to the weak economy in Southeastern Michigan. “Yeah. Their classes are full. I can’t tell you how many forms I had to return to students saying that they couldn’t enroll in a class” (R105).

Discussion ensued among focus group members regarding the impact of the college courses being full on CTE enrollment. A Maestro member stated that he hoped to get more students in his classes. He also noted that he had concerns regarding CTE being a second choice for many students at the high school (R103). “I don’t think our classes should be a fallback, or a second choice. It should not be, well, if you can’t do this or you can’t do that, you might as well, I mean, we should be steering kids into our classes that have a genuine interest in doing some of these things.” Another teacher continued the discussion by stating that CTE should not be an afterthought “not just a dumping ground because it fits into their schedule” (R104). This comment was one of many that noted that CTE classes were not at the very top of the list now for many students at the high school, due to the MMC mandate. Maestro group members discussed CTE enrollment increasing due to less room in the college classes for the high school students. A Masterful Maestro member stated, “The CTE classes should not be a dumping ground to fill up a student’s schedule” (R102). Another teacher noted, “That is what has been happening. I was talking with one of the secretaries the other day and I told her, if there are 2,500 students in the school, for me to get 25 kids in an advanced auto class is only1 percent. You can’t find 25 kids that are genuinely interested. They already do it in their pastimes anyway” (R103).

Focus group members generally acknowledged the negative impact that dual enrollment was having on their CTE course enrollment. The comments and concerns that
ensued from the Maestro group were not of anger or sour grapes but of acknowledgement of the MMC and the test eligibility scores mandated by it. Despite the open and honest discussion about dual enrollment, there was a feeling of optimism that the current CTE course offerings would be maintained and hope that there would be a steady trend upward in CTE enrollment.

Masterful Maestro focus group members talked about how the current job market in southeastern Michigan does not align with current CTE course offerings. The demand for certain CTE course offerings does not match the demand for certain jobs in southeastern Michigan. Courses in manufacturing technology are currently being offered at the high school. Fewer of these manufacturing courses are being offered, and the funding that the State of Michigan will reimburse school districts for these programs is less due to fewer jobs in the manufacturing area in the state. The declining need for manufacturing, coupled with the MMC mandate will add to lack of interest and enrollment in this CTE manufacturing technology course. A teacher noted, “I can talk about the manufacturing industry. You know the interest, I guess, has paralleled the demand because, you know, when I first started teaching there was a pattern shop real close to us where I could send kids, and they would get jobs. How can I sell my program if there are no jobs for the students once they leave the high school?” (R102). One Maestro group member noted that he has changed the focus of his manufacturing course to highlight welding, but if the trend continues, the current manufacturing course will no longer be offered at the high school. “Apprenticeship programs are practically nonexistent, the manufacturing industry has taken such a huge hit in the last three or four years. It’s kind of tough – I have to really concentrate on the welding end of it because
welding is used not just in manufacturing but in mill wrights, the iron working trade. There are a lot of different things, so you know it’s tough to try to sell your program with no jobs afterwards.”

The discussion continued by another Maestro focus group member adding to the discussion about welders needed in the State of Michigan. He noted that he heard the new Michigan governor talk about the current need for welders: “I was listening to him on one of the newscasts. He was saying there is a definite shortage of welders in the State of Michigan. Okay, now they’re taking the old guys back that have retired because there’s such a shortage. I also read something that said they were importing welders from Poland ‘cause they can’t find ‘em in the United States. They’re bringing them over ‘cause they couldn’t find people to do this, which I find is incredible” (R104). “I was in voc ed since the 70s, and it hasn’t changed. The only thing that’s changed is the availability of jobs, ‘cause I know that when we were doing voc ed back in the 70s, they had placement. You could find jobs. Like when I was teaching printing, I had guys that if they wanted to work, they had jobs. I mean it was not a problem. You just go to the voc department and they had a job” (R104). The teacher who talked about focusing his manufacturing course on welding appeared to be moving in the right direction. However, several of the Maestro group members appeared to be frustrated with the current state of the Michigan economy and with the affect that the MMC mandate is having on their CTE courses.

The focus group discussion continued about the topic of the MMC preparing all students for a college prep curriculum. Several teachers felt that some students should be prepared at the secondary level for skilled trades. “You know, I think the disconnect is – it’s such a bad word to talk about tracking. In the European countries, they do aptitude
tests very early and they move kids into the skilled trades” (R102). Maestro group members were concerned that all students were being expected to complete a college preparatory curriculum and that this was not a wise thing to do. These comments appeared to be one of a general concern for meeting the needs of students. It did not appear that teachers in the Maestro group were putting their own interests ahead of their students’. They seemed less concerned about losing their jobs. They were very interested in their students being short-changed, especially if the students were not interested in pursuing a four-year college degree. “Not everyone goes through what our kids have to go through here. The Michigan Merit Curriculum, I think, only perpetuated that falsity that all kids are gonna go through four-year programs in a university when they get out of high school and it’s just not – I don’t think it’s realistic” (R101).

The MMC has made provisions for students to take CTE courses; however, these provisions are not made until the student’s junior and senior years. Members of the Maestro group seem to feel that this has not helped the image of CTE, it has only added to the negative image. Prior to the MMC mandate, many did not look at vocational education favorably. This perception is currently amplified as CTE courses are perceived to be of lesser importance than core academic courses. “I think part of it, too, is that because CTE is considered voc, and vocational has always been given a bad rap? Like okay, you’re not college bound, you’re not gonna be the rocket scientist, so go do something else, and it falls under CTE” (R101). The discussion about the negatives associated with CTE continued, “CTE is also viewed negatively. I mean - Vocations” (R106). “We don’t want our kids to not go to college ‘cause it’s a sign of failure” (R105).
Members of the teacher focus group stated that many of the courses at the high school have been focused too much on academics, dual enrollment, and the MMC. The following comments are a reflection of many of the current dissenting beliefs regarding CTE. “It’s along the lines with this Michigan Merit Curriculum, of the dual enrollment is college, college, college, and our classes, a lot of our classes, may not necessarily need a whole four-year and post-secondary college degree. They don’t, and all they need is the experience, and nobody wants to give them the experience” (R105). “They have some type of background [in CTE classes] and they can’t get more background ‘cause they’re too busy on the college track” (R106). “We want to compete but we can’t ‘cause we are too busy doing, math, reading, and writing” (R104). “You’re right. Plus you know if you can get somebody into the workforce, they can actually earn their own money and use it for college. If they want some training later you can go back and get it” (R101). Most Maestro group members agreed with the need for the MMC at the high school. They seem to feel that it is needed in order to allow us to be competitive in this country. However, they felt there is a place for CTE at the secondary level. Therefore, there is a need to prepare some students for jobs and careers that do not necessarily require completion of a four-year college degree. The teachers acknowledged that many of the advanced CTE programs would require students to acquire additional education and training after high school graduation. As a result, many teachers felt that the additional requirements of the MMC are not necessary for all students.

Several Maestro members discussed how students ended up in CTE courses. One teacher noted that the counselors no longer bring kids to CTE courses in groups like they did in the past to expose them to the CTE offerings. The Maestro teacher noted that he is
much more involved in recruiting his students now. “They [counselors] don’t show kids what we have to offer them, and that’s something that should be done, because, when we get kids down here in our area who happen to walk by with a buddy they say, ‘Wow, you mean we work on cars here?’ Some of these kids don’t even know that the auto shop exists, that the welding shop exists” (R103). One other Maestro focus group member added “We all go to the to the class meetings in the spring and fall to talk to students about our programs” (R102). Another Maestro group member noted that it is much better for students to see what actually goes on in the CTE classes for themselves. “They love the visual stuff. They literally do, and that’s how they make decisions and that’s how a lot of them learn. So when they see it the hands-on, touchy-feely kinds of things, especially in shop classes, it kind of rings a bell with them, I think” (R106). However, CTE hands-on experiences are not always looked at as a positive thing. The experiences of “doing” in CTE courses are often viewed as the classes that are for the “other” students. These students have been looked at as those who are not going on to college.

Several Maestro members discussed the large numbers of students who take business classes because of the related class requirement that is associated with taking co-op courses. “You need a business class for co-op, and that’s how it’s done. At this school there’s a lot of family-owned businesses, and I don’t think you have this dynamic in other schools. I could be wrong. A lot of kids are running family businesses, and they leave here and then go into family businesses. So their co-op job is working for an uncle or they’re working for a parent. So where would be the logical place to have a related class for a student like that?” (R101). Several of the business teachers would like to have most or all of the students in their classes actually have a genuine interest in taking the
business classes, but they appear to be resigned that they get the students in their classes by whatever means they can. The MMC has eroded many co-op programs in schools and school districts in Michigan. The strong connections to family businesses in the high school have allowed enrollments to remain steady in the co-op courses and many of the related CTE courses.

As the discussion continued, it provided evidence of the varied levels of knowledge as the discussion moved towards politics and giving advice to school officials. The teachers know a lot about what is actually going on at the level above their building administration. I was confident that they knew a lot about the politics in the school district surrounding the MMC, but I confirmed this based on the depth of information that they provided to the focus group interviews. Masterful Maestro members have felt the impact of the MMC in their declining CTE enrollments. They live and work each day in a school district where individuals at various levels of authority know each other. Many of the individuals at different levels in the organization are on a first-name basis with each other. Oftentimes, the talk and the conversations lend themselves to rumors. However, many times what was said, heard, and talked about was true. Many Maestros focus group views have been shaped not only by what they hear, talk about, and discuss, but also by what they have actually experienced with their students in the high school. They have experienced firsthand lack of support from their former principal for CTE, as the MMC came to fruition. Their department, their classes, and their CTE colleagues have declined as a result. “We’ve cut out teaching. We’ve cut out teaching for enjoyment and learning for enjoyment. Everything is for the curriculum” (R101). A respondent continued with this point, “I remember when teaching was fun. I remember when learning was fun, but
now it’s you’ve got to teach this and they’ve got to learn this, and this has to be done by the end of the semester or the year” (R105). Several Maestro focus group members noted that prior to the MMC mandate, there was more autonomy with how they delivered the curriculum in their CTE courses. They stated that prior to the MMC they were able to insert many more projects into the CTE curriculum that made teaching of the subjects exciting for the teacher and the student. The teachers also expressed frustration for so much focus being put on the high-stakes tests. The teachers felt that this was what they had to do for their students. Two of the Maestro group members even noted that they did not mind teaching writing. This is something that CTE instructors were doing prior to the MMC, but the increased emphasis on writing and math naturally erodes the teaching time for required CTE standards and segments that must be taught in state-approved CTE programs. “Everything is for the curriculum, for the Michigan Merit Curriculum” (R104). “Case in point – we have to do writing assignments next week. We have to do writing. Sure. And it’s not a, I mean it’s not a huge thing” (R101). “It is okay if the assignment warrants it, but not because we’re trying to prepare them for that test rather than prepare them for our program to move on post-high school” (R105). The last point made by Maestro focus group members about high-stakes testing was, “We are teaching into the test basically – even though we claim that we’re not doing it. I mean you have no choice but to do it, if the goal is to make sure that they achieve on these tests then” (R102).

The discussion continued about compromises made and awareness about politics in the school district surrounding CTE, dual enrollment, and the MMC. Maestro group members were honest and openly discussed several sensitive issues during this part of the discussion. The fact that the teachers were being honest and open with me was very
important. I needed to confirm that I was perceived as being knowledgeable and that they would be willing to share and not hold back their thoughts and opinions with me. I was very appreciative that the teachers were very willing to share with me. Their honesty will add value to the triangulation of inquiry and my approach involving the participants, me, and those receiving the study.

I perceived that the Maestros knew a lot about the topics discussed. They have seen CTE in its glory, and they are currently witnessing CTE in a bare-bones form at the high school. I appreciated their optimism that CTE will make a comeback at the high school. I was very happy that many of the participants were so optimistic. Many of these same participants noted feelings of dissention towards CTE in the earlier parts of the discussion. They seem to have faith that CTE will recover, although recognizing the importance of academics to the success of their students. I share many of their voices and opinions, as the future of CTE is very important to me as well. I believe in the importance of exposure to CTE and CTE types of experiences, but I also do not discount the importance of all students needing a strong academic foundation.

Humor was a part of the very sensitive discussion that ensued about CTE teachers being flexible. The first response was “You name it, we’ve done it” (R101). One Maestro group member noted that she has used her certification as a language arts teacher for several semesters to keep a full-time job at the high school. “I did teach more language arts classes than I really wanted to, but it was not much better in those classes either. They have a real hard time connecting with what they need to do in this core Merit Curriculum course. This is where CTE has an advantage” (R101). Many teachers who left the CTE departments after the MMC mandate remain at the high school or have
moved to other high schools in the district to teach core MMC courses. Discussion ensued in the Maestro group about the lack of support for CTE from the previous principal at the high school. I noted many comments by participants that the former principal’s abandonment of CTE had a negative ripple effect on CTE programs as the MMC was mandated. “There were extenuating circumstances that made the CTE teachers leave. No support from administration” (R103). Maestro group members were very frank in their responses that CTE teachers left the high school because of the decline in CTE enrollment due to the MMC mandate. The exodus was also from lack of support from the previous principal. “At each building, the principal, whether they think so or not, really drives what the kids take. Absolutely – some of them, I believe, don’t think that they have that much to do with what classes the kids take, but you saw our former principal; he pushed for high levels of dual enrollment. He didn’t send any kids over to the Career Center. He said that those skills weren’t worth learning. He came from our department and basically killed it, you know, so I think the principals need to know that they do have a key role in driving all of our curriculums” (R102).

There is a great deal of excitement at the high school regarding the new principal and leadership at the school. The new principal was a former student at the high school. He also was enrolled in many CTE courses while in high school. Although he is well aware of the mandates and requirements of the MMC, he has also made a commitment that students will have a well-rounded educational experience in high school. The focus has shifted from a strong push for dual enrollment to a commitment to CTE, and project-based learning at the high school. “I know we don’t need to be too specific about this, but we talked about some of the reasons why the school store went away, and then
marketing. In the past it has been one of the most heavily funded CTE programs – we had a school store here, we had so many kids enrolled in those kinds of programs; our new principal wants to see the store come back” (R101). These types of comments from participants are very different from the many perceptions that it is right for CTE to have less presence in the school because of the MMC.

Conversations continued with advice to school officials regarding politics, the MMC, dual enrollment, and CTE. Teachers continued to be very honest and open at this point in the discussion. Laughter was often a part of the interviews. Several Maestro group members are not comfortable with the new leadership at the central office or with many of the current school board members. They want to have individuals with backgrounds as educators making many of the important decisions regarding the sensitive issues that are involved in implementing the MMC. A few Masterful Maestro focus group members stated that they would like more attention given to the sensitive needs of the unique population of students and the community at the high school. “They have no clue. They need to come in here and see what’s going on, and somebody needs to stand up to the state and say, “Listen, you have no idea. You’re making all of these requirements but you don’t know the culture of the kids. You don’t know the caliber of the kids, and yes, they could be college-bound but not all of them want to be” (R101). “You had different values on education and what education needs to be for different people. In this community what is required and what is maybe expected is gonna be completely different than what it is in Imlay City, okay, because this is a unique community” (R104).

The cultural differences associated with the high school are a concern for the faculty members. The large Arab-American population in the high school makes it
unique. Required adjustments are made for students to qualify them to meet the mandates of the MMC, but the differences make the needs of the students, faculty, parents, and the community unique as well.

A Masterful Maestro member noted that many high-level school officials in the district need to seek other employment and that the real need now is for the school officials to have an educational background. Laughter ensued when the statement was made, “They need to get another job” (R101). “We have a superintendent who has no educational background. How many of our school board members have not been in a classroom other than with their kids? They don’t know what’s going on, but they’re making all the decisions that we have to face every day. They don’t see it. So that’s where they need to be pushing for the CTE versus dual enrollment versus the Michigan Merit Curriculum” (R101). These views and opinions by the teachers appear to be shaped by the noticeable changes in the district’s central office. Maestros appear to know a lot about politics at the local school level. This became evident in the information that they shared with me regarding politics and advice to school officials in the focus group discussion. It also told me that they perceived me as someone that they can trust. I hope to be perceived by the readers of my research as one who presents the data factually, in a way that makes sense. This open sharing about politics and providing information and advice to school officials added immensely to the data collected regarding politics at the local level and its influences on CTE, the MMC, and dual enrollment. I share many of the views of the Masterful Maestros. The current central office administration is so different from past administrations. These differences have created a political climate in the district that does not always promote trust and open communication.
As the focus group was ending, the majority of the Masterful Maestro respondents noted that CTE was the most important topic discussed. This was expected based on the makeup of the Maestro focus group. The following closing comment from one respondent provided a tender and memorable moment, and it is a good summary of the overall tone of the Maestro focus group discussion: “This could really have been a complaint session, and I think we did a pretty good job of touching on the things that really concern us, and we’re all on the same page, I would say. You have been here [moderator], and you’ve seen the way the cycle has turned in our department” (R102).

**Collegiate Student Scholars (dual enrollment students).** The discussion began with the review of the informed consent forms. Students then completed the demographic form, and the interviews started with students naming the classes in which they are enrolled. They then talked about what they enjoyed doing in their spare time – hobbies, sports, exercise, relaxing, and playing video games.

Students in the focus group talked about the challenges involved with the MMC, dual enrollment, and CTE. One Student Scholars focus group member stated that it was “hard work” (R204). The discussion quickly moved to dislike for the MMC. “I hate the Michigan Merit Curriculum. It is pointless” (R203). “Some of the classes we have to take like the World History class – the social studies classes – they’re completely useless. They are. I don’t see how [what] World History or certain social studies classes are gonna do for me, or even math classes – like statistics and stuff – I don’t see what they’re gonna do for me in college. I’m going in to fine arts” (R201).

Dislike for the MMC requirements continued, as the third Student Scholar responded, “I feel like I’m wasting my time in many of the core classes. I take those
classes, college classes, and auto classes. I really like the auto classes; they are easy for me” (R205). These types of comments support the need for CTE. They also discount the perception that the additional core course requirements are the only answer to increased rigor in their high school. Students seem to feel that the dual enrollment courses are a challenge, and they like the idea of going on a college campus and getting the college credit while in high school. They are resigned to taking the courses that are required of them by the MMC, but most of them resent having to take many of these courses. They do not see that they need many of the MMC courses for the college majors or the careers of their choice.

The students in this focus group know a lot about dual enrollment. Their views are shaped by several things; one is that many of their siblings, or friends have had dual enrollment experiences. The Student Scholars noted that it is an expectation that they dual enroll because “everybody” at the high school takes dual enrollment classes. The views of the students in this focus group are also shaped by the fact that they were well informed about the MMC prior to coming to high school. They stated that they had attended meetings prior to attending high school that were very informative regarding the “new high school graduation requirements.” The students seem to embrace the MMC and appear to do what they have to do to meet the MMC requirements and mandates.

The Student Scholars’ views regarding politics were somewhat limited, they do not know a lot about local level politics. I expected this, as the students are not as directly connected to school politics as the other focus groups, such as the Authority Figures and the Masterful Maestros.
I feel that I was perceived as an authority figure by this student group. I attempted early in the interview to establish myself as a current and former member of the high school family. I feel that I got buy-in from the students when I reminded them that I had been a former assistant principal at the high school. I also explained to them that I was still interested in what occurs at the school by doing my research involving students, faculty, and parents at the high school. Several of the students remembered me as being a principal in the school district. I sensed that they trusted me, and they did open up and fully participate in the discussion. I share many of the perspectives of the students. I was made aware of these shared perspectives as the interview progressed. I found myself attempting to balance how much of my perspective to reveal or share with them because I did not want to skew the information that I was garnering from the group.

As the discussion continued, the Student Scholars group members noted that they have found that many of the college courses that they have taken are not as challenging as some of the honors or advanced placement courses in which they have been enrolled at the high school. “Dual enrollment classes are sometimes easier than the high school classes” (R204). “I mean, I’ve taken – I’m not saying they’re easy classes, but in college, usually it’s said that they’re hard classes or whatever, but I see them [dual enrollment classes] as being a lot easier than here” [advanced classes at the high school] (R201). One group member stated that he found the college courses to be a challenge, but that the online courses were not as difficult. “No, for me they’re harder because I took Medical Terminology in college, and I took Criminal Justice and Law when I was a junior, but now I’m doing the easier classes. There’s two online classes, Telecommunications and...Info Tech; those are easier” (R204). Findings from the Student Scholars group
solidified the fact that students, based on their skills and abilities, found the college classes to vary in difficulty. Students in the Student Scholars group appeared to be aware that various stakeholders (parents and faculty members) felt that students would be just as challenged or even challenged more by taking the honors and advanced classes that are offered at the high school rather than the dual enrollment courses. However, many of the stakeholders agreed that the benefits of the college experience for many students are worth it, as opposed to the student taking an equivalent course in the high school. Two Student Scholars noted that they ended up in many of the dual enrollment courses because they wanted the challenge, but they also noted that they like the idea of sleeping in or leaving school early. “Um, I heard I get to leave school early. Yeah, but then I ended up staying here ‘til 5:00 p.m. now.” (R204) “So it didn’t matter. Yeah, not anymore” (R201).

Student Scholars focus group members responded that family members made them aware of many of the courses that they were taking. This response supports several comments from the Masterful Maestros teacher group. One teacher in that group noted that students work in the family businesses. Another Maestro focus group member stated that many of the students work on cars in the family businesses and as a hobby. “For me, when I was younger, my dad always showed me about cars and how to take apart stuff and put ‘em back together, so that’s why I took the auto class. I learned when I was ten years old, you know. And then my mom, she used to be a nurse, and she would – like, every single day teach me new medical terms. So I took the medical class, and it was like I already had a step – you know, a step ahead of the game” (R204). The discussion in the Student Scholars group continued regarding the students’ family members sparking their
interests in taking the CTE, MMC, and dual enrollment courses in which they are enrolled. “My brothers told me about it, and they said it’s better for my future and helping me to maybe to go in the field of auto tech. So I planned on taking it, and it turned out to be interesting. So I continued” (R204).

A Student Scholar responded that dual enrollment courses prepared him for college and life beyond high school (R201). “Well, dual enrollment prepares you for college, because it gives you a feeling of how college life is going to be. But at the community college, not really – it’s a small step because a class, like, at a real university, I don’t know if it is true, but some people told me that there’s like 100 kids in one university class. That is true, right? Is that how it is?” (R201). “Yeah, but I mean it just feels like a regular high school classroom at the college. But all the people – No, because, like it’s a smaller class, but with a bunch of older people. So that gets you used to that kind of stuff – that kind of college environment” (R205). “It’s a much, much bigger campus that has a lot of dual enrollment students in many of the classes. It’s mainly older adults. In some of my classes I was the youngest kid” (R203). Student Scholars focus group members are getting good experiences from enrolling in college courses while in high school. However, the large numbers of students from the high school enrolled in some college courses is altering the college experience for many students. Several members of the Student Scholars focus group indicated that they want to take the college courses for the college experience, but when so many high school students are in the class, the purpose is defeated.

The students in the Student Scholars group had varied levels of understanding regarding dual enrollment, CTE, and the MMC. The students in this group appeared to
have limited awareness of the MMC mandate. Responses from the group members focused on safety on the college campus. Several students discussed the fact that many parents are not comfortable with the students going to the college after the shooting incident that occurred there several years ago. “I heard a lot of parents say they don’t want their kids dual enrolling at the college because of what happened. I think a guy shot someone and then himself, so they closed down the school and a lot of parents got worried and stuff, and they didn’t want their kids going” (R202). “So they felt like they – they would rather the students to be in the neighborhood at school – you know, it is a safe area – good – everything’s good” (R205).

On the other hand, the Student Scholars group had quite a bit of advice to offer the superintendent, the principal, and school board members regarding CTE, dual enrollment, and the MMC. “I don’t think some of the classes should be, like, mandatory for us to take. I don’t think there should be all of these MMC classes. Students should have more say in the courses that they take based on what they are interested in. You know, and plus for that dual enrollment thing, I think the district or the principal should kind of watch out who they let take dual enrollment classes” (R201). Discussion continued among Student Scholars members about the type of student who should be allowed to dual enroll. “Student should be serious about taking the classes, because some students just take ‘em just to take them” (R202). “There need to be rules. Yeah, some kids just take classes. I don’t want to say the GPA, because GPA kind of – I don’t believe in it because grades aren’t – they don’t reflect what some students can do. They also need to look at how many times they have been suspended and fights they’ve gotten into” (R205). Two students felt that grades and suspensions have nothing to do with how
successful students might be in college. “That has nothing to do with college. I know a lot of people who got suspended and in fights and everything; now they’re doctors making over $1 million a year (R204). “They should have a chance you know” (R202). The discussions ended with comments based on students earning the right to dual enroll in college courses. “Yeah, but if you have those immature students inside a college class, where people paid to be in that class, and they’re disturbing that class, they’re taking away from people’s money – you need to earn the right to be able to do that” (R203). Though not stated explicitly, students in this group implied that dual enrollment should not be treated as an elective class.

Discussion ensued in the Student Scholars group about language arts in the MMC. This discussion revealed things about the MMC curriculum that I did not anticipate. Two students noted that they had difficulty with math courses. The discussion on math and the MMC was not surprising to me. Math was the most controversial topic in the MMC mandate. However, I was surprised that three of the Student Scholars focus group members said that they did not agree with all of the language arts requirements that are mandated in the MMC. This is surprising as four years of language arts has always been a requirement for most high schools and school districts. “They are so pointless” (R201). “And, like, if they wanna keep teaching Language Arts, they have to change it up, not learn the same thing freshman year as I was learning when I’m in senior year” (R201). “But basically, when you get to Language 131 and 132 classes, same thing – all you do is write essays” (R204). One student disagreed with the other three and noted that the language arts classes are the most important for students to take. “I disagree with him. I think the language arts classes are the most important classes here at school” (R203).
Many comments came from the students regarding the math requirements that resulted from the MMC policy mandate. “Why do they need math? So you can draw triangles and stuff” (R203). “I don’t need math. I don’t feel like I need math. I don’t feel like I need to take an AP Statistics class to graduate” (R201). “But every teacher I’ve had since sixth grade admitted to the class, yeah, most of the math you’re not gonna use once you leave school. And we’re not. The math that we’re not gonna use once we leave school – they should take it out” (R204). “They should get it out of the curriculum. If we’re not gonna use it, why teach it to us?” (R202). “And literally every single teacher admitted this – some of this math you’re not gonna use it” (R201). “Yeah – the teachers admit it, but the thing is you need that math to pass that class. I’m gonna go into the medical field, and the minimum of math is Calc. It’s Calc II, and right now I’m taking AP Calc in high school, so next year when I go to college it can be easier for me. So math and science go together. You need both” (R204).

Student Scholars group members continued the discussion about giving advice to school officials. Several students felt that many of their teachers should retire. These Student Scholars members felt that many teachers lack the enthusiasm to teach students in a way that makes learning challenging. One student focus group member noted that the principal and the superintendent needed to monitor many of the teachers. “Watch your teachers” (R204). “Check out your teachers, is one thing” (R205). “I’ve had two teachers teach me the same exact material, and the way one teacher taught it, I was like, Wow! And the way this other teacher taught it, it was like, what? What are you – what are you teaching? You’re not – it was just practically, read this, answer these questions. This other teacher – read this. How is it relevant? What does it mean?” (R204). One group
member noted that she would advise school officials that too many language arts classes were mandated in the MMC (R201). “Cut down language arts classes. No, not cut ‘em down. Change ‘em. Change it up” (R205). Finally, a student scholars focus group member stated that she would advise the principal and the superintendent to “Change the curriculum, and if some students aren’t really interested in that, okay, some students aren’t interested in art; why should they have to take an art class for the visual arts MMC credit? I get it – it gets them to think outside the box, and they can apply that in life and think creatively in everything they do. Okay, but they don’t need the art class – they don’t need it. I don’t need a history class” (R201). Curriculum, standards, and benchmarks are mandated in the MMC policy. However, how the curriculum is delivered is at the discretion of the teacher and school administrators. Students are aware of these differences and they have noted that the differences and discrepancies are not in the best interest of students. Overall, most students in the Student Scholars group do not object to the MMC policy mandate, but they would like to see changes in many of the courses, and choices that students have in electing to take these courses. In closing the discussion, four of the Student Scholars group members noted that the dual enrollment courses were the most important to them. One student noted that both dual enrollment and CTE courses were most important to him (R203).

I felt an obligation to document accurately what the members of the Student Scholars group shared with me. The data gathered from them adds a lot to my research. The students were very honest and they behaved and commented in ways very typical of high school students. I really enjoyed interacting with this group of students.
Authority Figures (administrators). Four administrators participated in the Authority Figures focus group. All four of the administrators are assistant principals at the Southeastern Michigan high school. The interviews began with the principals talking about what they enjoyed doing. Comments were shared about golf, exercise, reading, and traveling. The good working relationships that these co-workers shared were evident in the very beginning of the interviews. The atmosphere was light, but the Authority Figures were engaged in the discussion and willing to share their views on all of the issues as they were raised during the interviews. Reflexivity with this focus group was very important to me since I have a background as a former school leader at the high school. I currently serve as the district CTE coordinator, and I have other leadership roles at the high school level in the district. I felt that these leadership roles had a positive effect on how I was perceived by the group of school administrators.

I know firsthand that the Authority Figures know about the issues related to dual enrollment, CTE, and the MMC. These administrators have many and varied experiences with dual enrollment. The high school has the largest numbers of students participating in dual enrollment than any other high school in the State of Michigan. All Authority Figures have experience with scheduling and with curriculum. The individuals in this focus group know a lot about all of these issues. The Authority Figures focus group’s views have been shaped by functioning as an assistant principal in a school of 2,500 students and the many hours of contact they have had with students. Their views have also been shaped by the many contacts that they have had with parents and teachers. I share many of the Authority Figures opinions. We have had similar interactions surrounding dual enrollment, CTE, and the MMC. We also have shared many of the same
experiences with politics at the local level in our school district. The similarities related
to politics surrounding the MMC mandate were also noted with members of the
Masterful Maestros group and certain members of the Reluctant Conclave focus group.

The discussion began with members of the Authority Figures focus group’s
concerns regarding dual enrollment. “The effect of the MMC on CTE and dual
enrollment began about 10 years ago, even before the MMC was mandated. Before the
bond was passed and the addition was built at the school, we needed the dual enrollment
because we did not have the room or the seats. Then here come the tests, the standards,
and the MMC – we started minimizing the trades and the kids who were not as
academically inclined” (R301). “Many of our students are eligible for dual enrollment
under the MMC eligibility rules, but they are really not ready to take college classes”
(R301).

The scheduling of students in dual enrollment classes was also noted: “So many
scheduling problems, when you are trying to schedule 600 into dual enrollment classes at
the college” (R303). Participants in this group noted that differences in the semesters at
the high school and at the college also presented scheduling challenges. “You know we
are on different semesters, so what happens is they’ll sign up in January and drop out
after three or four weeks. I can’t really do this. Well, our semester doesn’t start until
February, so they are able to drop the college class – that’s a big problem” (R304).

Discussion also ensued regarding teacher union issues and the large numbers of
students who are taking dual enrollment classes at the high school. “From a teaching
perspective, I want to know why the teacher’s bargaining unit is okay with that,
especially when we are losing more and more teachers” (R301). “We have more of our
kids that are supposed to be ours that are gone to college that are not ready. Now if they are ready, I mean, I have no problem” (R303).

Similar discussion took place in the Masterful Maestros focus group about students not being ready to dual enroll despite being eligible to take college classes as mandated by the MMC. The assistant principals, as members of the Authority Figures focus group, do not appear to have a clear understanding regarding the new requirements, rules, and eligibility requirements as mandated by the MMC policy as they relate to dual enrollment.

Authority Figures continued the discussion about their experience with dual enrollment, the MMC, and CTE by talking about the decline in elective choices for students due to the MMC requirements. One Authority Figure stated, “Students are not getting valuable work-based learning skills in the MMC academic classes. The MMC is not helping students develop work skills. Students are getting less exposure to CTE and work-type classes and experiences – they are not being taught these things” (R304). The discussion turned to all students being treated the same with the MMC policy mandate. “Everyone is in the same lane. We are treating them all as if they have the same interests – going to a four-year college. Why not do it like the Europeans do it? What is wrong with learning a trade? Somebody has to do it” (R302). “This MMC has created more of the have and the have-nots. The CTE and the CTE-type kids are being minimized” (R304). “And instead of just trying to get them to their best avenue, like he said, we wanted to put everybody in the same avenue and say, ‘Well, we want everybody to be a doctor.’ Well, you know, that’s great, but that’s not gonna happen. And I think where – whereas, you know, with the European model, kids are kind of, you know, selected”
“Okay, you’re gonna go this way. You’re gonna go this way.’ Where we don’t need to do it like that, necessarily, we need to have another option for kids who aren’t maybe as academically inclined” (R301). Authority figures are frustrated with the lack of differentiation with the MMC requirements. However, most of the Authority Figures agreed that more rigor was needed in the high school curriculum, and they felt that revisions were needed in the standards for high school students. These focus group members felt that one of the major problems with the MMC mandate was that all students were treated the same. It is assumed that all students were at the same level, and that they all had the same skill sets. Several Authority Figure group members stated that not all students are interested in a college prep curriculum while in high school. A need for an alternative route or plan for these types of students would allow them to have more choice in the electives they take and may benefit many of these students.

Administrators discussed their concerns about the rigid MMC requirements. “We need more flexibility with the MMC” (R303). This statement was made by an administrator who noted the need for more leeway and flexibility with the MMC policy mandates, if the goal is for all students to be successful in earning a high school diploma. She continued her comments by stating one example could be tying the requirements to the career paths that students have identified for themselves. “For example the requirements could be based on career paths in which students identify an interest. “Every student should complete algebra and enough geometry to be successful. Some students [CTE] could take algebra and geometry in a CTE type format” (R301). She gave other examples related to this topic by stating, “A student interested in engineering, to illustrate his point, this student would continue on to pre-calculus and/or calculus.”
Another Authority Figure focus group member stated that “Here in Michigan, we go from no standards to the highest standards in the country” (R302). The conversation continued about how the MMC standards are unrealistic for many students. “You have kids failing classes, and then you’ve got to find a spot for them to take a required class. Next thing you know, they’re taking night school or doubling up on math or doubling up on science. And how realistic, how successful is a kid going to be with that type of schedule? So there are a lot of limitations to it, too” (R301).

Authority Figure focus group members engaged in discussion regarding the pressure on administrators and counselors for students to dual enroll. Laughter was a part of many of these conversations in the Authority Figures group, but the following comment from one of the administrators resulted in a lot of laughter. “When I was teaching psychology, one of my students ended up getting a D minus as a gift. But, you know, there – there’s an example of peer pressure run amok, because the peer pressure is saying that these kids should be in dual enrollment. ‘Oh, I’ve got to take dual enrollment.’ Well, no. You – you need to take single enrollment because that’s the one you’re not doing very well in first. That – that – that would be one – one of the crazy things” (R302).

This part of the discussion centered on the economics of dual enrollment. “The district is getting, you know, for every college class we offer a kid, they’re getting a hundred, a couple of hundred bucks. So, you know, from a budgetary standpoint, you know, it makes sense to them, even though we don’t talk about it. That’s a fact, you know?” (R302). Administrators expressed concern regarding the school district paying for classes that students at the high school fail on a regular basis. They noted that the
college is making money when high school students enroll in their classes. Hence, focus
group findings indicated that the entire dual enrollment process needed to be more
transparent. Teachers, parents, and school officials need a better understanding of the
rules, regulations, and requirements involved in high school students taking college
courses. Communication to stakeholder groups could clear up many of the
misunderstandings regarding dual enrollment.

Administrators felt that there are politics involved in parents being told that their
child is not ready to dual enroll. They also noted that counselors do not help this
situation. They cave in to many parents. “Well, I think, to me, it goes back to the same
thing with dual enrollment, you know. You’ve got parents that call and say, ‘My kid
should be in this and that’s the way it is.’ And, you know, it’s hard to tell them that, ‘No,
your son is not ready for that, yet.’ ‘My son should be in this’” (R303). An Authority
Figures respondent stated, “I’m going at it with counselors all the time, saying, you
know, ‘That’s not what this class is for.’ ‘Well, their parent wants them in there.’ Well,
that’s too bad, you know, and that’s part of the problem. You know, you can’t – all of a
sudden, you can’t tell a parent, ‘No, no. You don’t know what’s best academically for
your child.’ In the old days, you’d just tell them and, you know, this is how it is and – and
they understood that you were the professional and they were not the professional”
(R304).

Another Authority Figure noted, “You know, from an athletic standpoint, it’s the
same thing in athletics. You get parents who think their kid’s gonna be in the NBA and,
you know that watching them, they can’t even make the high school team. It’s just to me
the expectations are almost segmented. You know, we don’t – we don’t really – there’s
not a whole lot of dealing with reality and the politics of it is that parents usually get what they want” (R302). Authority Figure group members deal with parents all the time, but they revealed that they were in a difficult position when the expectations had been established at the high school that allowed so many students to participate in dual enrollment. The findings of the focus group interviews revealed that administrators, as well as counselors, should communicate to parents the expectations for students who dual enroll. It then can become clearer to students and parents when dual enrollment may not be in the best interest of certain students.

Discussion continued among the administrators about the lack of understanding and support of the MMC policy mandate at the high school level. Focus group members stated that it is so important that the policy-makers understand how the MMC policy is being implemented and what issues have occurred because of the implementation. They talked about the No Child Left Behind legislation, stating that these types of policies and decisions are being made at the local level by individuals who are not educators or true school administrators. “Yeah, so that’s probably where it’s our fault in terms of educators that, you know, we need to speak up. And then you get legislation like - No Child Left Behind –Yep– and you get this curriculum in place from people who haven’t even been in a classroom” (R303). “They have no idea. They have never taught. You know, I was in a classroom for ten years. I know some others have been in there for more, but, you know, you’ve been in there a while now, too. What they’re asking us to do doesn’t go with the reality of today, okay?” (R301). “And I guess we’re all saying, it’s just like, you know, maybe when you make these kinds of decisions, take the teacher into account,
maybe you take the administrator into account. It’s just the whole culture of accountability” (R302).

Authority group members felt as if they had little say in the MMC mandate at this point. Several administrators talked earlier in the focus group discussion about the need for more rigor and revisions to high school curriculum and requirements. They did not feel supported on many issues by the level of administration above the building-level administration. They felt that many things would and could be better if higher-level school officials had backgrounds in education and school administration.

The discussion about politics, compromise, and advice to be given to school officials continued. One Authority Figure group member noted, “Politics, the MMC policy mandate, and the legislators themselves have gotten in the way of education. They won’t let us do our jobs” (R302). “Math in the MMC is good, the standards are rigorous, and the students need it. We offer lots of help for those who find the math difficult here at this school” (R301). “They do not like it, but the four years of language arts is good for them too. They need all the practice they can get in writing” (R303). “It is hard to make this MMC thing work with the limited dollars. We have no money – our class sizes are large. I wonder why some of these decisions were made in this bad economy here in Michigan at this time?” (R303).

All of the administrators in the Authority Figure group felt that of all of the topics discussed in the focus group interview, the MMC was most important. I was not surprised at this response. School administrators were focused on teaching and learning each day. The bottom line is, the measure of the success of the school is based on the MMC policy
mandates. Measurers of school success also involve the Michigan Merit Examination and how the high school is rated based on Adequate Yearly progress (AYP).

I felt obligated to document what my colleagues shared with me, as it added to the limited information about the MMC, dual enrollment, and CTE. I feel that the stories they shared added immensely to this research study. The members of the Authority Figures focus group shared information with me with a lot of ease. Individuals receiving the information should not find it difficult to make sense of what I have given them.

**Enthusiastic Technetronics (CTE Students).** The four students in the Technetronics focus group began the interview session by identifying the classes in which they were currently enrolled and the things that they liked to do outside of school: basketball, swimming, computing, and playing videogames.

The discussion started with the students about dual enrollment. Two Technetronics students stated that their parents preferred that they take traditional dual enrollment classes rather than online dual enrollment courses. This discussion mirrored the talk in the Student Scholars and the Masterful Maestros groups. “She [the parent] thinks interaction, if you’re not having interaction, like communication face-to-face with a teacher, she thinks like it’s not really learning” (R403). Students in the Technetronics group, like teachers in the Maestros group and students in the Student Scholars group, noted that many students dual enroll for the wrong reasons. “Students don’t take dual enrollment to take dual enrollment. They take it to leave early” (R404). “They want to go home and sleep” (R403). The misconceptions regarding dual enrollment and the rules that exist that allow students to dual enroll are spread across the stakeholder groups. The consensus among most of the focus groups was that students are enrolling in college
courses, although they are not ready to, for dual enrollment and that many are taking college classes for the wrong reasons. Masterful Maestros and Authority Figures noted that many of their students are not mature enough to take college classes. Several members in the two focus groups also noted that students at the high school feel that many of the lower-level college courses are easier than many of the upper-level or advanced placement course offering at the high school.

Technetronics students discussed how their own personal experiences helped them chose CTE courses. Two students noted that they are in CTE courses because they know they want to go into the medical field. “Just to get an idea of what you wanna be when you get older, ‘cause obviously medical is something that people need to get into” (R403).” When you look, like say, five years into the future, like, that’s really the only field where they’re always gonna need more workers” (R404). “Cause it’s not like people are gonna stop getting sick because there are no jobs. There’s always gonna be a job opening there. They’re always gonna need people in that field” (R402).

Several students in the Technetronics focus group had been enrolled in beginning CTE courses such as personal finance and business. Two of the Technetronics group members have identified a career interest in health and medicine, and they are aware that secondary CTE courses are a way for them to gain access to CTE while in high school. Another Technetronics student noted that he wants to be athletic trainer and he is taking an allied health class at the Career Center that he likes very much. “I know I want to be an athletic trainer, and I like my allied health class a lot. I am learning so much that will help me get experience in this area” (R402).
Technetronics students discussed the influences that family members have had on the CTE courses that they are currently enrolled in or that they have taken in the past. “Last year is when my cousin told me about the CTE courses. So I went to the counselor, and she signed me up for the technology courses” (R401). “I did this program ‘cause most of my family are in the medical field. I have four cousins; they’re doctors, and three of my older cousins, they are general practitioners. That is what I want to do as well” (R403).

Students noted that their friends told them about the CTE courses. Several students in the focus group said that they saw it on the monitors at school and then went to their counselor to enroll in the classes. “I did not know about the CTE classes or programs until my friend told me” (R404). “Yeah, I saw it on the TV monitors too” (R403). Successful CTE recruitment efforts center on word-of-mouth from other students who have enjoyed the elective courses. High school counselors’ promotion of CTE courses is an effective recruiting tool. The use of technology such as TV monitors in the high school to recruit and promote CTE classes is an easy and effective way to build enrollment. Finally, the family connections noted by the Technetronics students are consistent with other focus group evidence. The Masterful Maestros and the Collegiate Student Scholars also noted that family members had influence regarding course enrollment. Retention and recruiting methods are essential in building and supporting students in CTE programs.

Technetronics students were very honest and open regarding how the MMC gave them the background to take dual enrollment courses and to attend college after high school. “I am not crazy about some of the hard math classes, or the physics or chemistry,
but I need them to graduate and I need them to do well in college” (R401). “They told us in middle school that we would have to take these merit classes in high school. I took Algebra I in middle school, so I came to high school with credit” (R403). “We did not ask questions, we just know this is what we have to do to get a high school diploma” (R403). “Yeah, if we know what’s good for us we just do it” (R404). “I think they all are good, the electives – CTE, dual enrollment, and the merit classes – they all are getting you ready for what you need in the real world” (R402). “It is even more important now, jobs are not easy to get. We need to be ready, and so we have to learn this stuff in high school and in college” (R403). Discussion from the CTE students continued about CTE, dual enrollment, and the MMC. The students were not complaining, nor were they questioning the need for most of the MMC courses. They were accepting of the MMC mandate, and felt that they and most of their classmates could have success in passing their classes and graduating from high school.

Technetronics discussed how their parents like the MMC. One Technetronics respondent noted, “My mother likes the merit classes. I think she likes the fact that I am taking so many math classes. I agree with her; math has to do with everything. Everything has to do with math” (R403). “My mother thinks the Merit Curriculum is good, because it makes you set goals for yourself” (R402).

The discussion quickly moved to the challenges offered by the MMC. “Yeah. The new merit core classes challenge you. You better be motivated to take them, if you want to pass and graduate, so in the long run, it will help me when I go to college. “I will have a good background for those classes” (R401). “And then when college comes, you’re not just hit with all this homework and all these tests. You have an idea because you took
Most students felt that the MMC and dual enrollment was preparing them for college and life beyond high school. They seemed to think that the increased core requirements were needed for them to be successful in college and in their future career choices. Therefore, it appeared that the mandate was successful, with many students convinced that they needed the academic background to be successful in college and at life beyond high school.

Two Technetronics students noted that some of the responsibility for students being successful with the MMC is on the parents. “I think it’s on the parents, if kids drop out or not, because when I was small I wasn’t that great in math. My mom used to give me, in the summer, 15 pages a day to do. My mom would always be behind me on stuff. She’d help me with my homework. She’d sit me down like, after dinner every day, like, you know, if you start your kid on the right track, they’ll end on the right track, you know?” (R403). “Yeah. Just saying, “Do better next time” is not gonna do anything, you know? You have to help your kid; you have to do something about it. You can’t just say, “Do better next time” (R404).

One Technetronics student noted that many students used their problems at home as excuses for not being successful in school. “Some kids’ reasons are that their parents are working or they have stuff going on so they do not try. There is a lot of help at our school for them – social workers, liaisons, and stuff” (R403). Two students in this focus group also noted that they felt it was not impossible for the students to pass the MMC courses. “It’s like there’s something to work for, you know? If you don’t do it – Goals,
setting goals for yourself. Yeah, setting goals. It’s if you don’t pass this, you’re not going
to college, like, all your dreams. That’s it. They’re gone, you know? So pass it, just work
hard, and then you’ll get there” (R401). “It’s really not hard to pass your classes, believe
me, it really is not” (R403). Many resources are in place in the high school for the
students to be successful in passing their classes. The school offers credit recovery,
summer school, tutoring, and other interventions. Assistance is also available to help
families that cannot afford to pay for the night and summer school courses. No matter
what the situation is, for many of the students at the high school, there are resources to
help students be successful in passing their classes and graduating from high school.

The Technetronics students noted that the principal at the high school needs to
constantly promote the CTE course offerings. “Put it more out there ‘cause there are a lot
of students at the school that would like to take the CTE classes” (R402). The CTE
students in the Technetronics focus group, the Masterful Maestros, and the Collegiate
Scholars groups noted that many students are interested in dual enrollment for the wrong
reasons “They want to go home and sleep” (R404). “They take college classes to leave
school” (R401). One Technetronics student noted that many of the students cheat in the
online dual enrollment courses: “Erase my name on this, but you’ll have a group of
friends who take the online college classes, one person does the work and they email the
answers to the others” (R401). The discussion revealed that many misconceptions exist
regarding dual enrollment requirements and regulations. Findings in this focus group
revealed that the rules needed to be communicated to the students and their parents. The
expectations of the outcomes for dual enrollment needed to be discussed with the
students and to other stakeholder groups as well.
I was concerned with this focus group, as I was with the other focus groups, that my position would have a negative effect on the observations and actions of the members of the group. This appeared not to be the case, as the students’ behavior was positive and they openly shared their stories. Enthusiastic Technetronics know a lot about their school and what is going on there. They know a great deal about the classes they are taking, their core, as well as their CTE courses. The group members confirmed that they know a lot by the in-depth responses that they gave during the focus group interviews. Enthusiastic Technetronics views on the issues related to CTE, dual enrollment, and the MMC are shaped by their direct involvement in all three of these issues. The students take CTE classes. They are involved in dual enrollment, or they know someone who has taken a dual enrollment course. Finally, they all are engrossed in the state-mandated MMC requirements.

I hoped to be perceived as an adult with a background in education who was reflexive about my research. I felt that reflecting on critical thinking and being honest and open about the research experience allowed the students interviewed to be comfortable sharing their stories. The students did tell their stories. They gave complete and detailed information. There were many tender moments, and they used quite a bit of humor during our discussion. Technetronics did not have a wealth of information to share regarding local school district politics. However, the points they shared about politics and the offering of advice to school officials reflected their political knowledge base and their political views and opinions. The information shared by students should not be difficult to follow or interpret. The data are presented using the voices of students as much as possible.
The focus group discussion was ending when two students noted that CTE and dual enrollment were most important to them. Two Technetronics group members noted that all three were important to them: dual enrollment, CTE, and the MMC. In closing, these comments could have been expected from this group of CTE students. All of the students in the focus group seem to have a good understanding of what it takes them to be successful in their core MMC courses. They also appeared to know that they want to take CTE courses to prepare for a career. All of the Technetronics students referred to postsecondary plans after high school. Members of this student focus group appear to fit the MMC/CTE model. They are students taking MMC courses who plan to graduate high school and attend college or pursue postsecondary experiences and training.

**Proactive Progenitors (parents).** The discussion with the parent group began by parents introducing themselves. They shared their professions and the classes and programs in which their children are involved at the high school. Several parents shared a funny anecdote and then talked briefly about their interests or hobbies. The atmosphere was established after the brief introductions. The Proactive parents were comfortable and appeared willing to be active participants in the focus group interviews.

It was important to me to establish my credibility with the parent focus group at the start of the interviews. I aimed to get credible feedback from this focus group. This feedback was positive at times and not so positive at other times. However, I felt that I was perceived well by this focus group. The Progenitor Parent focus group members accepted that I was seen as a member of the high school family. This acceptance was also seen in the Authority Figures, The Masterful Maestros, and both of the student focus groups. Progenitors were very open and honest in their responses. This openness, and the
fact that the parents apparently trusted me, was reflected in their responses to many of the sensitive topics.

I share many of the views of the parents in the Proactive Progenitors focus group. I can connect with them because I have a son who is a member of the graduating class of 2013. I can relate to the parents on many of the issues that they discussed regarding the MMC. I tried to put myself in their shoes, and I shared some of my views with them where appropriate. I also shared the views of the parents who believed that their children and the students at the high school needed to have experiences in CTE classes to prepare them for future careers.

Prior to meeting the Proactive Progenitors face-to-face, I made phone calls to get a commitment from the parents to participate in the focus group. I established with the Progenitors on the phone that they had familiarity with the issues and topics of CTE, dual enrollment, and/or the MMC. The parents’ knowledge base was verified early in the interview process as they revealed what they knew. The Progenitors also revealed their level of involvement at the school.

The focus groups interviews with the parents revealed circumstances by which their views are shaped. The parents are quite involved with their children at the high school. This group of parents is among the first group of parents of graduates affected by the MMC. Parents noted that their children were not getting credit at colleges and universities for the dual enrollment classes that they have taken at the high school. Several parents have taken classes at the local community college. They had personal interactions on the community college campus with students from the high school. The
Progenitors stated that they have personally witnessed the differences in foci of administration as the transition is made to a new principal at the high school.

A Proactive Progenitor parent began the discussion about dual enrollment, saying, “My son has taken several college classes, but he also has taken business classes as well. The CTE experiences are good for them to have, too” (R505).” Both of my children are taking college courses right now. There is a lot of benefit in them getting used to college at this age. They know what the expectations are before they really get there” (R504).

The discussion quickly changed to the MMC as one respondent, noted that her son was having difficulty with the MMC requirements. “My son is heavy into the auto classes. He has even taken two at the college, but he has struggled with the math and science in the MMC. Why does he have to take all of these courses?” (R504). Several other Proactive Parents joined in the discussion, “I do not think that you feel that the math, and science is all bad for him, but you feel that it is too much if he is not sure he wants to go to a university yet – right?” (R501). One parent confirmed that her son wants to continue at the community college for now. She added, “Not all of the students at this school want college prep” (R503). The MMC policy mandated dual enrollment eligibility. This rule likely allowed the student to take auto classes at the community college, but the parent is upset that her son has limited options in the core classes that he must take based on the MMC policy mandate. The objective of the MMC is that all students would be college and career ready upon graduation from high school. The fact is that this young man has not decided to go to a four-year university yet. However, it appears that the MMC objective of being ready to attend postsecondary programs upon high school completion is being achieved in this situation. This student has options. He
can go to a community college, pursue postsecondary training, or enroll in a four-year university program.

The discussion moved toward the many changes that have ensued with the MMC implementation at the high school. “My son is interested in business and marketing. He has taken a lot of the classes, and he was involved in the school store. Many of the classes are no longer offered, and the school store has been closed” (R502). “Yes, everything changed with the former principal – many of the electives are gone now. Why change? The new requirements are a part of this, only a part – of all of the change” (R505).

Several Proactive Progenitors, like most of the Authority Figures, are aware that the lack of support from the former high school principal had an effect on the CTE and elective programming at the school. The support from the new principal is reflected in comments from several members in the Authority Figure and Proactive Progenitors focus groups. Therefore, it is evident from the findings in the focus group discussions that there is optimism regarding additional electives and CTE course offerings for students in the future.

The group discussion continued as Progenitors discussed how their children became enrolled in their current courses. Two parents noted that the school counselors assisted their children, guiding them into the dual enrollment courses, “My son is aware of the courses because his counselor told him about the college class opportunities that would be best for him” (R501). “My son knew he wanted the business and marketing. He sort of followed my lead in being interested in business and CTE while in high school” (R502). Another parent stated, “My son has always been interested in cars, like his dad and his brothers. He wanted to take the auto classes like they did in high school” (R503).
These comments from parents regarding relatives influencing the decisions to take CTE courses also appeared in the Student Scholars, Technetronics, and Masterful Maestros focus groups. There is a big push for college experiences for students at the high school, but the cultural influence of families owning businesses tied to CTE is not totally lost as the MMC policy mandate has been implemented.

All Proactive Progenitors noted that the dual enrollment and the CTE courses have prepared their children for college and careers. Two parents stated that the students need the MMC course work, but they also need to be prepared for jobs and to work.

“Give them the opportunity to take the career courses, they are important, too” (R504).

“The MMC is good; that is the intent of the whole thing – I mean, academics right – get them ready in high school” (R505). The importance of academic requirements is primarily in the minds of several members of the Progenitors focus group. However, all of the parents acknowledged that their children also need elective experiences while in high school. The attitude of wanting both experiences for their children appears to align well with the expectations of many of the teachers, the administrators, and the students at the high school.

“I have not been happy with these MMC requirements. My son has not done that great with this. I am not sure about any politics. Parents did not question this mandate. But any politics around here seems to favor these requirements – It seems that this is all they care about anymore. Kids have less and less fun now or choices in school. So there have been no real politics to help kids like this” (R503). “I agree with you, it seems all of the politics is around all the students from this school that take college classes and how much credit they have when they go to college. That is all well and good, but when my
son went to the university, they did not take much of the community college credit as transfer credit” (R501). “Yes, this whole dual enrollment thing is political in that the parents seem to expect that their kids go to the college whether they are ready or not” (R505). The push for dual enrollment at the high school began more than 10 years ago. There was not room in the school prior to the addition, and students were sent to the community college because of space limitations. The MMC eligibility based on test scores has made dual enrollment available to many more students. This had a snowball effect and resulted in the feeling that dual enrollment was out of control at the high school. Many comments from the Proactive Progenitors regarding politics were similar to many comments from the Masterful Maestros, Student Scholars, Authority Figures, and Technetronics regarding the lack of understanding about dual enrollment. Focus group findings indicated that a clearer process and more effective communication of the rules about dual enrollment would likely resolve many of the misconceptions.

A Proactive Progenitor stated that her son had to compromise because he failed two MMC courses. “He has had to double up on the math classes, leaving him no room in his schedule for the electives he enjoys, and I am having trouble coming up with the money to pay for his night school classes” (R503). “My son has had to make several compromises; he failed a few MMC courses and his counselors did not communicate very well to us the options that he had to help him [the student] pass his classes” (R502).

“I won’t say that CTE is negative. It has been working here at this school all of these years. I realize that this MMC makes it hard for some kids. But you still have a lot of students that want to take these types of courses” (R501). This parent’s perception of CTE was that the classes are okay; however, they are not necessarily the classes that her
children take at the high school. She noted that her children attend the DCMST (math and science honors program) and they have little or no interest in the CTE courses that are offered. “Yes, these courses help them figure out what they want to do in life” (R505).

The discussion continued about advice to be given to the superintendent and/or the principal at the high school. Several Proactive Progenitors stated that they felt the MMC was good preparation for what the next steps are for students after they finish high school. “They need the preparation to go to college, even if they do not go there right away. I do not think that this MMC is really all that bad for them” (R504). Many of the Proactive Progenitors stated that they would advise the principal to continue to support rebuilding the business and career classes at the high school. Students do need to take classes other than core classes each day. The current MMC allows students to take electives. According to the MMC mandate, electives are more challenging for students during the first two years of high school. Enrolling in electives is even more of a challenge when students fall behind in MMC credits and fail classes. Credit recovery and night school are available for students in ninth through twelfth grade. Therefore, students have opportunities to recover credit immediately after they fail a class.

The discussion regarding advice to the superintendent or principal subsided as the Progenitors talked about dual enrollment. One parent believed that all students at the high school should be given the opportunity to take college classes. Another Progenitor felt that only the students who are ready and more likely to meet the requirements should be given the opportunity. “Not any student should be allowed to take dual enrollment; high standards should be set” (R501). “They need to be on the right track in high school before going to college, I think” (R504). “I think that everyone with the test scores should be
given a chance to try dual enrollment” (R505). “Students making Ds and Cs in high school might do better by getting the challenge in college classes. Just because they have a 4.0 in high school does not mean they will have a 4.0 in college” (R503). The focus group members did not agree on this matter regarding dual enrollment eligibility. The MMC mandate has established eligibility based on PLAN, MME, and ACT scores. The high school is following the eligibility rules. Focus group interview findings revealed that a clear communication process to stakeholders regarding dual enrollment would go a long way in assisting individuals to understand the expectations regarding dual enrollment. This was supported by the conflicting comments above.

The parents shared useful information that added to the limited information currently available regarding the MMC, CTE, and dual enrollment in Michigan. I feel obligated to document in my presentation a clear reflection of what I garnered from the Progenitors. Documenting what the parents said was difficult at times, as they were noting many sensitive issues that involve my current upper-level management and one of my former high school principal colleagues.

As the discussion ended, three of the five Proactive Progenitors stated that the MMC was most important (R503, R501, R504). Two of the Progenitors stated that CTE was most important to them (R502, R505). Based on the responses from the group members throughout the focus group discussion, these answers were predicable.

Reluctant Conclaves (combined). Reluctant Conclave Focus Group members gave brief introductions and shared hobbies and interests with the group. Reluctant Conclaves shared their experiences and meanings of CTE, dual enrollment, and the MMC. A student Conclave member shared his experiences in CTE classes: “The
technology classes are making me very well informed about technology and jobs related to technology. This is getting me ready for my career and my ability to take care of myself and earn money” (R602). The other student in the Conclave Group added, “I like the CTE classes, too. It gives me a break from my core classes, I like using my hands, and I can do that in the technology classes that I take” (R603).

The discussion continued about preparation for 21st century jobs in CTE classes and about the MMC. “Our CTE classes are really the only exposure students get in high school to learning about work. The MMC does not allow students the flexibility they used to have” (R601). The MMC assumes that all students are going to need a four-year degree to be successful and to earn a decent living. Discussion ensued early in the Conclave group about how CTE experiences can get jobs for kids with some postsecondary training. Students can get certificates in some areas, get entry-level jobs, and attend college or additional postsecondary job training as they go along later. “The economy is bad here in Michigan, but there are still jobs here for people that do not have to a four-year degree. You can get certified in certain areas and earn a decent living” (R604).

Several Conclave focus group members stated that they agreed in principle with dual enrollment preparing students for “getting a jump start on life after high school” (R605). One focus group member commented, “Many of the students at the Southeastern Michigan high school get an opportunity to participate in dual enrollment and earn college credit that could not afford it otherwise” (R606). Conversely, discussion followed regarding the MMC eligibility scores that allow students to participate in dual enrollment. Participants in the Conclave focus group indicated that many students were ready for the
college experience while in high school and many were not. They perceived that students and parents needed to be accountable once students are enrolled in college courses. “I think that students should be held accountable ‘cause that’s our money going over there. And if they can’t get a C or better, then they should have to pay us back – pay the school district back” (R605).

Several members in the Conclave focus group felt that the opportunities that the MMC provides for students to earn postsecondary credit are a positive thing. “These students get to experience what college is like before actually going full-time. Getting used to going on campus and having some freedom – well, the student has the responsibility to go to class. So the responsibility becomes totally on the student to make sure that they get there on time; that they study” (R601). “The dual enrollment does benefit the student a lot, especially the students that are really mature enough to handle taking college classes. . . . Yes, see – you know, they’re not gonna be able to go to college and pass – there is more studying, more pressure” (R602). The Conclave Group members raised major concerns early in the discussion about CTE, the MMC, and dual enrollment. The group members as representatives from each stakeholder group appeared to have a good background and understanding of important issues about dual enrollment, CTE, and the MMC. Members appeared to be open and honest in the early discussions. I was interested to see if this group’s responses would differ from the other, more homogeneous focus group responses.

The Reluctant Conclave combination group did not appear as relaxed as the other focus groups. This group appeared to be holding back with many of their responses compared to the other focus groups. This made it important to me to approach the
triangulation of inquiry in a thorough and complete manner. The group members needed
to understand me and what I was attempting to uncover with my research project. They
perceived me as trustworthy. A circular type of reflexivity was established to get true and
complete responses from the Conclave focus group. I worked to establish trust with the
Conclave group and perceived them as knowledgeable in their roles as students, parents,
and faculty members. I confirmed that the Reluctant Conclave group members knew a lot
about what they were saying as the interview progressed. They gave complete responses.
They responded to many sensitive issues as well. I could sense somewhat of a stiffer
posture from this group. There was a difference in comparison to the more relaxed stance
that the other more homogeneous groups took during the entire interview process. Humor
was a part of the discussion, but it did not occur early in the discussion. Members of this
group took longer to get accustomed to each other than members of the other focus
groups. I shared many of the same views with the Conclave focus group members. I am a
parent of a student who must complete the requirements of the MMC. I am also currently
involved with the politics at the local level in my current role as an administrator in the
school district.

A Reluctant Conclave respondent noted that the CTE hands-on experiences and
the opportunities for project-based learning with other classes and departments in the
high school has been part of his and his students’ recent personal experiences since the
MMC policy mandate was implemented (R604). “These types of projects tie the core
curriculum to CTE-type classes such as auto tech and business. It adds meaning for the
kids, and they are actually getting real world practical learning experiences” (R604).
Another Reluctant Conclave focus group member stated, “The MMC has caused me to lose students in many of my CTE courses. I also ended up without a job teaching CTE courses in this school for a while. I am gradually getting back into the CTE courses, as we add the classes back into the schedule” (R601). “Declining enrollment in most cases means losing staff members in those areas because of the MMC requirements. We have had to add more math and science staff. The State of Michigan told us what we have to do, but gave us no additional money to do it. As a matter of fact, each year we get less and less money, and we have to make more and more cuts” (R604). The lack of funding in Michigan schools is an issue that has caused major cutbacks in the five years since the MMC mandates. Faculty members continue to be creative in how they deliver the curriculum and meet the needs of students in these tough economic times.

The discussion quickly moved to offering CTE and CTE-type experiences at the elementary level as opposed to middle and high school. One Reluctant Conclave member noted that introductory CTE experiences were offered to students in elementary school, but went away when the funding went away. “Bring CTE into the elementary schools – continue through grade 12. We are looking at education backwards” (R604). The current lack of funding at the lower grade levels for career awareness only appears to strengthen negative attitudes towards CTE courses for students at the middle and high school levels.

One of the students in the Reluctant Conclave Group noted, “The CTE classes that I am currently enrolled in are preparing me for my future career in medicine. I started in the business and personal finance classes. I am now also taking a class at the career center in allied health” (R603). Discussion ensued regarding the need for the MMC. Most Conclave Group members agreed that high schools in Michigan needed to be revamped.
“The curriculum needed to be looked at. Our students need to be in a better position to compete for good high-paying jobs.” The landscape in our state has changed, we needed to do something” (R606). A focus group member raised the question, “Did we need to make the curriculum and the classes so rigid?” (R601). Discussion ensued about the requirements being too inflexible. One respondent noted, “The only thing we have any flexibility in with the MMC is the math requirement in a student’s senior year” (R605). Responses in the Conclave group were very similar to other focus group responses. The Masterful Maestros, Proactive Progenitors, and Authority Figures noted the need for a more rigorous high school curriculum. It has only been four years since the MMC policy was mandated. Many members were curious to see if these rigorous standards were going to have a positive impact on students’ preparation for postsecondary experiences. The question also remains unanswered regarding whether every student in Michigan will pursue some type of postsecondary training.

A minimum amount of discussion took place regarding how students at the high school ended up in courses. One student stated that he went to his counselor. The other Reluctant Conclave student participant noted that he saw the dual enrollment courses on the school monitors and signed up for them (R602). Finally, one Conclave parent noted, “I called my child’s counselor myself – I needed to make sure he and I understand what the rules [dual enrollment] were, like, who pays or buys the books, and stuff like that?” (R606).

One Conclave focus group member stated, “There are plenty of politics centered on all these things – CTE, dual enrollment, and especially the MMC mandate” (R606). This group member also expressed concern over the eligibility scores that allow students
to participate in dual enrollment. Several participants in this group indicated that many students were ready for the college experience while in high school and many were not. These Reluctant Conclave focus group members perceived that students and parents needed to be accountable once students are enrolled in college courses. “The school district and the taxpayers are paying for their classes – if they fail the students, and parents need to be responsible if they fail, just like they do when they drop after the deadline” (R601).

A parent participant in the Conclave Focus Group stated that it is political “when the hoopla is made of all the dual enrollment here for the students, but many of the classes do not transfer. My children went to the college to dual enroll and got the credit. Some of the credits were not accepted, but the ones that they accepted at the college, they transferred them there” (R606).

A teacher participant felt that she had to make compromises due to the decline in CTE enrollment, because students no longer had room in their schedules for the courses, and that many state-approved CTE courses did not satisfy the MMC senior year math requirement. “The class enrollment declined, and I ended up without a job here. So they won’t count classes I thought should be counted as math, the one semester math-related class for seniors; I think that hurt CTE and CTE enrollment.” (R601). Another respondent in the Conclave Focus Group (R604) expressed concern regarding declining CTE enrollment due to the MMC. “I think CTE is being hurt with the MMC, with the emphasis on math, science, and language arts and the muted point for education for our kids that tends to put CTE on the back burner, as if it has nothing to do with education, which is false. There needs to be more focus in CTE, more funding to give kids the
hands-on experiences of science, math, and language arts and writing. This could allow them to excel in math, science, and language arts” (R604). This continues to be a very sensitive topic. It has been noted that many students enrolled in CTE courses do excel in their core courses. However, the negative stigma associated with many CTE courses does not allow the benefit to outweigh the risk for many students. Staffing was noted as political and an area where compromises had been made. A Conclave respondent also noted, “The MMC has affected the staffing at the high school. It’s affected us with staffing ‘cause you’re forced to add all of these additional math and science classes that kids need to graduate according to MMC credits” (R604). Several respondents in this focus group felt that the state enforced these new credit regulations but did not increase the funding to facilitate these changes. “They actually decrease your funding, so, therefore, where are you gonna cut your staffing? You are going to cut your staffing in the CTE area because you’re only staffed with an x number of staff members for your building” (R605).

Participants in the Reluctant Conclave focus group had different and, in some cases, limited levels of understanding of the MMC and its mandates on CTE and dual enrollment. This limited background and understanding affected the discussion, especially on issues related to politics, compromise, and offering of advice to school officials. The teacher and the administrators in the Conclave group had the most to add regarding politics, advice, and compromise. However, the Conclave focus group participants responded to all of the questions. The number and depth of responses regarding politics, compromise, and offering of advice to school officials were more comprehensive from the focus groups that encountered these issues on a daily basis. The
Masterful Maestros and the Authority Figures focus groups had the most to add to the discussion on these issues.

The Conclave focus group was called reluctant because the lack of homogeneity in the group might have affected how members responded to many of the questions. The Conclave’s responses to the questions were more reserved in many cases. Although the atmosphere during the interviews was friendly and cordial, the discussion was not as free-flowing as the other five focus groups during many of the discussion questions. There were memorable moments, but not as many as in the other more homogeneous groups. However, there were many parallels in answers to questions; some involved personal experiences, others were about how the MMC, CTE, and dual enrolment prepared students for college, a career, and life beyond high school.

Responses to advice offered to the superintendent, the principal, or school board members included “Bring the CTE classes back – students need them” (R601). “Students also need more physical activity – these classes and the focus on these things got lost in the MMC mandate as well” (R605). “Look into the dual enrollment thing; a lot of kids are doing it for the wrong reasons, they just want to get out of school early” (R602).

Three CTE participants noted that CTE was most important to them (R602, R603, R601). Three respondents stated that the MMC was most important (R604, R605, R606). These respondents included the parents and the administrators. No one noted a combination of CTE with the MMC or dual enrollment.

Politics

This study examined the participants’ perceptions of problems and politics that emerged when the MMC was offered as the solution to the need for high school reform
and increased rigor at the high school. The teacher (Maestro) focus group and the administrator (Authority Figures) focus group provided rich discussion about problems and politics that emerged from the MMC mandate. In the Maestros focus group, the CTE teachers noted that there are too many non-educators making important educational decisions. They stated that all teachers in the high school are doing too much teaching to the test [MME], and that local central office administrators are only concerned with touting large numbers of students who are participating in dual enrollment. The teachers felt that the central office leaders have little concern whether and how students are benefiting from the dual enrollment experiences. One Maestro focus group member noted that the problem with the MMC is that it is too broad. Local communities have different needs, and the MMC does not address the particular needs of certain local communities.

The other focus groups (Student Scholars, Technetronics, Proactive Progenitors and Conclave Group) members provided input and answers to questions about problems and politics. However, they had limited insight into the state and local politics that evolved from the MMC being offered as a solution to the need for high school reform and increased rigor. Respondents in several focus groups noted that students are different and the MMC treats them all the same.

Authority Figure Focus group members noted that politics was involved in parents’ high expectations that their children are ready to participate in dual enrollment, when, in many cases, the students are not ready. Authority Figure focus group members stated that the MMC supports a test score being the only criteria for dual enrollment. This was uncovered as a political problem at the local school level.
Finally, in an overall summary of findings related to politics, eleven focus group members noted that many problems have ensued because so many non-educators are making important educational decisions related to the MMC. The issues surrounding non-educators in charge in the school district appeared to be a big concern for many focus group members. Non-educators running the school district are a new experience for the stakeholders. However, concerns regarding lack of funding to support the MMC mandate are also very legitimate concerns. These focus group members in the Authority Figures, Maestros, and the Conclave Group stated that the curriculum has become more of a political issue than an educational one in many cases. Authority Figures also discussed the lack of support by state and district officials to implement many of the MMC mandates. They discussed the problem of MMC being a mandate, and the lack of funds to implement many of the necessary things associated with the MMC policy. The findings related to politics at the local level are highly charged.

Cuts to Perkins and Tech Prep funding added to the politics surrounding the MMC and CTE at the state and local levels. The purpose of the Carl D. Perkins Career and Technical Education Act is to develop more fully the academic and technical skills of students who enroll in CTE programs. Perkins funding was maintained in both the Michigan House of Representatives and Michigan Senate appropriations bills. Many individuals, politicians, and other stakeholders worked hard to protect funding for this educational investment. These federal resources help ensure that CTE programs are academically rigorous and up to date with the needs of business and industry, support innovation, and expand access to quality programs.
Conversely, Tech-Prep funds were eliminated in April 2011. Perkins funds were cut slightly in 2011 due to the loss of population in Michigan. These cuts to CTE programs added to the political climate centered on CTE and the MMC in Michigan. However, the re-authorization of Perkins funding appears to support the ideas that Perkins funds provide support to strengthen America’s workforce. Experts predict 47 million job openings in the decades ending in 2018. About two thirds will require an associate’s degree or certificate, and nearly all will require real-world skills that can be mastered through CTE (NASDCTE brief, 2011).

Rigorous Programs of Study (RPOS) have surfaced nationally and in the State of Michigan to act as a replacement for Tech Prep agreements with colleges. RPOS are defined as a comprehensive program of study structured for delivering academic and career and technical education to prepare students for postsecondary education and career success (NASDCTE brief, 2011). RPOS resemble Tech Prep agreements. However, since Tech Prep funds are no longer available, Perkins funds are currently allowed to support RPOS agreements. RPOS like the former Tech Prep 2 + 2 agreements are designed to add rigor to high school CTE programs. The U. S. Secretary of Education, Arne Duncan, has challenged states to implement more RPOS that include statewide articulation agreements and are aligned to high-skill, high-demand occupations (NASDCTE brief, 2011).

**Emergent Themes**

Themes emerged following a selective coding process. In the coding process, themes developed from large groups of ideas that were shared in each group (Creswell 2005; Krueger, 1994; Neuman, 2003). The five themes that emerged included (a) Transparency and Communication for Dual Enrollment (b) Need for Flexibility (c) Loss
of CTE and Elective Programs (d) Acceptance of the Status Quo and (e) Support for CTE, Jobs and Careers.

**Theme 1: Transparency and Communication for Dual Enrollment**

Respondents expressed concerns that no specific process or criteria existed to determine student eligibility for dual enrollment. Respondents indicated that there is a great deal of confusion regarding the rules for dual enrollment. Many focus group members stated that the rules were not communicated to all stakeholder groups. The lack of communication has led to the opinion by people at the high school that many rules were not followed. Some focus group members even indicted that they felt that rules were being broken for many students.

There is a need for members of all of the stakeholder groups to understand the rules associated with dual enrollment and mandated by the MMC. Participants noted that the rules, as prescribed in the Postsecondary Enrollment Options Act, need to be transparent. They stated that the dual enrollment rules need to be posted at the school and given to faculty members, students, and parents. “My son took several dual enrollment courses. I have been told that a meeting is held at one of the other high schools for parents and students. This would be very helpful” (R501). The stakeholder group members should be able to reference the rules related to dual enrollment if they need to. Respondents in many of the focus groups stated that the rules need to be clearly communicated to the stakeholder groups. Furthermore, participants noted that more effective dual enrollment placement would occur at the high school if stakeholder groups were more familiar with the rules and the state law.
Participants indicated that many students who are taking dual enrollment courses are not ready for the experience. They felt that the school district should develop criteria to establish guidelines for students to qualify and participate in dual enrollment. The high school has been using ACT scores and following the law as prescribed in the Postsecondary Enrollment Options Act (Act 160 of 1996) to qualify students for dual enrollment (See Appendix E). However, group participants in all focus groups expressed concerns regarding dual enrollment. Masterful Maestros, Student Scholars (Dual Enrollment Students) and Enthusiastic Technetronics (CTE Students) noted that students are more interested in the early release or late start from high school than they are in the experience that they can get by enrolling in college classes while in high school. “So they get out of school two hours early and they don’t even go to school. They just go home or do whatever they want – I don’t think that is right” (R102 - Maestros).

Respondents also noted that students’ GPAs determine dual enrollment eligibility. “You have students in high school with a GPA of 1.2 taking college courses. They are struggling in high school and they are dual enrolling. Does not make sense” (R102 - Maestros). Several respondents noted that many students were not ready for the dual enrollment experience. “Without any standards, it seems that if a kid says they want to take a certain college class, we just make it available for them whether they can handle it or not. Many are not ready yet” (R302 - Authority Figures). “This is one of my issues – we have all these kids that are taking these classes and how many of them are really the kinds of kids that are ready for that experience yet? I think this is a part of our problem” (R301- Authority Figures). An Authority Figures member stated, “I wish they had dual enrollment when I was in high school, cause I wanted a jump start on college – it blew
my mind to see that kids are failing their high school classes and yet we’re sending them to college and paying for it” (R303).

Several students noted that the dual enrollment classes have been challenging.

“The dual enrollment and the whole college thing is hard work” (R204 - Student Scholars - Dual Enrollment students). “Dual enrollment is hard work because it’s in college and stuff.” However, one respondent from the student scholars group stated, “Dual enrollment classes are sometimes easier than the high school classes” (R201). Responses in the Maestros and the Technetronics (CTE students) focus group indicated that the on-line dual enrollment classes were easier or not as effective for high school students. “I’m not saying they’re easy classes, but I see them a little easier than here at school” (R203 - Student Scholars – Dual Enrollment students). “There’s two online classes – Telecommunications and Information Technology, those are easier (R204 - Student Scholars - Dual Enrollment students).” One participant in the Masterful Maestros focus group noted that her parents do not like her dual enrolling in an on-line class. “My mom is not a fan of the on-line college classes. She feels we learn better when we talk to the teacher to understand, not like over the computer.”

Authority Figures focus group participants discussed the pressure that parents put on administrators at the high school to get their children in dual enrollment classes.

“You’ve got parents that call me and say, ‘my kid should be in this and that’s the way it is’; it’s not easy to tell them that their child is not ready” (R303 – Authority Figures). Respondents expressed concern that different criteria determined eligibility for dual enrollment prior to the MMC and scores used to determine eligibility. The students who participated prior to the MMC were the highest academic achievers in the school. This
still is the case with many high achievers, but in recent years, they noted many more students participating in dual enrollment. Respondents also noted that the current dual enrollment participants are of varying academic achievement levels. Participants also noted that peer pressure exists among students to participate in dual enrollment. “This is peer pressure run amok – OK I’ve got to take dual enrollment – well, no, you need to take single enrollment because that’s the one you’re doing well in first” (R302- Authority Figures).

Theme 2: Loss of CTE and Elective Programs

Some focus group members noted that the MMC and dual enrollment would have a negative impact on CTE enrollment, and participants in several of the focus groups were very specific about the negative impact that the MMC and the dual enrollment have had on their CTE class enrollments. “We have lost so many teachers and kids from our department. I am willing to take on additional responsibility, if necessary, to bring some of our classes and programs back” (R102). CTE teachers talked extensively about how the CTE department once had more than 13 teachers and now, only five since the MMC mandate. Respondents in the Masterful Maestros and the Authority Figures focus groups noted that after their students meet the MMC requirements and their expectations for dual enrollment, there is no room in their schedules for CTE or other electives. Many Maestros and Authority Figures group members discussed introductory CTE courses that students completed prior to the MMC. Many introductory courses have been eliminated because of the increased academic requirements embedded in the MMC. Students in grades nine and ten, who normally took intro courses, are now required under the MMC
to take more core courses. According to the focus group participants, losing these introductory courses has negatively influenced course enrollments.

Beginning CTE courses give students the background and training needed for the advanced courses. A Maestros group member gave an example of this by noting that prior to the MMC, he had no problem filling his advanced auto classes (R103). However, since the MMC mandate, he expressed frustration about not being able to enroll 25 students for an advanced auto program, out of a building with 2,500 students, where many students work on cars in their free time as a hobby. Therefore, respondents expressed a feeling of loss of students, loss of CTE colleagues, and loss of CTE and other elective courses due to the demands mandated by the MMC.

Many of the participants expressed concern that the MMC could cause more students to experience academic difficulties. They felt that, ultimately, many of these students might not graduate from high school. This further illustrates the theme of loss. In the focus group discussions, the majority of participants agreed that more rigors was needed in the high school curriculum, but many respondents agreed that the MMC is too rigid, and that it’s not in the best interest of many high school students. An Authority Figures member stated, “We need other options for kids that are not as academically inclined – more flexibility – because we all know there’s kids out there like that” (R302). This same Authority Figure member noted that the MMC requirements treat all students as if they are the same. It assumes that all students have the same skill sets and they all learn in the same way. A CTE -Technetronics student stated that school administrators need to pay more attention to how the students and benchmarks identified in the MMC are being taught (R404). He noted that students are different and that they learn in
different ways. Several focus group participants indicated that the MMC expectations are that all students will attend college, regardless of their skills and aptitudes. A Maestros focus group member agreed that the MMC is only solidifying false ideas that all students will attend college and/or university programs. He stated that is a very unrealistic expectation (R104).

Participants in the Masterful Maestros, Student Scholars (Dual Enrollment Students) and Conclave groups asserted that not all students were ready to attend college and that high school was the ideal time to explore areas that could possibly result in a career choice for many students. Respondents noted that due to the MMC requirements, students have lost the opportunity to explore career pathways, and they lack the career and work-based learning skills they may have learned in these courses and programs. Focus group members in the Authority Figures group mentioned that students were having less opportunity to take CTE classes and were not developing skills that would help them in the world of work (R304).

Participants also noted that the MMC has minimized the importance of CTE. They expressed that this is causing them to lose CTE students, and CTE program offerings. Respondent R301 (Authority Figures) stated that the trend that CTE and the trades that were being taught in high school were being put on the “back burner” began occurring four or five years prior to the MMC being mandated.

**Theme 3: Acceptance of the Status Quo**

Many focus group participants indicated that the MMC is a mandate that would not change in the near future. “The Merit Curriculum is what it is and we have to deal with it” (R103). Respondents expressed frustration because they felt that more rigor was
needed in the high school curriculum. Therefore, there was a general feeling of acceptance of the status quo in all of the focus groups for the MMC. However, many participants indicated that students participating in dual enrollment should be screened more. They also stated that they would like to see students at the high school have more opportunities to take CTE or other electives.

Therefore, there is support for CTE despite the attitudes of many who feel that the core MMC courses take precedence. Respondents in all focus groups agreed that Michigan high schools required more rigor. Participants agreed that Michigan residents need to change their ways of thinking about jobs, from reliance on the auto industry and manufacturing to focus more on knowledge, academics, and providing services. Several focus group members commented on the need for students to be able to compete in the global marketplace.

Many participants perceived that the MMC could raise academic standards in Michigan schools. A focus group member in the Authority Figures group stated that he thought that the MMC could increase the rigor in high schools. He noted that the other focuses of the Cherry Commission on relevance and relationships were suffering because of the importance of core academics (R302). “When I look at this curriculum, it is rigorous. However, the other buzzwords used – what are they, relevance and relationships? We still need to work on those two” (R302- Authority Figures). Other groups noted the importance of competing globally but that educators need to be mindful of spending too much time concentrating on math, reading, and writing.

Most members of the Student Scholars (dual enrollment students) and the Enthusiastic Technetronics (CTE students) focus groups have accepted the requirements
of the MMC. These participants stated that they understand and accept the requirements and that their peers who are having difficulty meeting these requirements need to take advantage of interventions and support mechanisms (e.g., credit recovery programs, night school, summer school, and after and before school tutoring, and so on.) to assist them in passing their classes. An Enthusiastic Technetronics – CTE student noted, “There is help offered in the school for students. They don’t need to fail classes” (R404).

Theme 4: Need for Flexibility

Participants in the Maestros, Authority Figures, Proactive Progenitors, and the Reluctant Conclave focus groups asserted that the MMC is viable as a high school reform mandate. However, these respondents indicated that greater flexibility was needed to meet the needs of many students who attend the high school. An Authority Figures focus group member noted that standards and benchmarks were necessary, and more were needed, but they need to be less rigid if the majority of the students are going to be successful (R302). Members in these groups expressed concern that the requirements and standards established by the MMC could produce more students who might not meet the academic requirements of the MMC. They indicated that these students could end up not graduating from high school. An Authority Figure stated, “This new curriculum is not really helping our population. We are setting our kids up for failure with this” (R301).

Most parents in the focus groups wanted their children challenged academically. The majority of the parents did not disagree with the increased academic demands put on their children by the MMC. They were very concerned about opportunities and resources available to them and their children to help their children be successful and ultimately earn a high school diploma. However, a respondent in the Proactive Progenitors group
noted her son was struggling with the MMC requirements and that he wanted to attend community college (R504). She expressed a need for a different pathway other than all of the requirements of the MMC for her son who wants to be an automotive mechanic.

Another parent in the parent group stated that her son failed several of his MMC required core courses. “There is no wiggle room in these requirements. It looks like he will graduate but he has been taking one required course after another to do it” (R502 - Proactive Progenitors).

Participants in the Conclave focus group noted that the MMC needed greater flexibility or compromise to meet the needs of many students at the high school. Several Focus group members were concerned that members of the Michigan State Board of Education have not even considered making compromises to the current MMC. A Conclave group member noted, “The state has got to first think about compromises before we can even talk about compromising at the high school level. I understand that, but we are likely to be willing to give up something here that the state and federal government is not” (R604). Most participants noted that they have concerns about the one-size fits all that is a big part of the MMC. They expressed concerns that they do not have any flexibility to provide compromises for many students. This Conclave focus group member continued to express frustration with the MMC by stating, “There is no room for flexibility. The only compromise they gave us was for the final math class” (R604).

**Theme 5: Support for CTE, Jobs, and Careers**

Several participants expressed concerns that, with the MMC’s focus on math, science, and language arts, elective courses such as CTE appear to have nothing to add to
a high school student’s education. Most focus group members thought that the hands-on experiences in many of the CTE courses gave students opportunities to gain the knowledge and skills that allowed them to be successful and excel in math, science, and language arts. These focus group members also noted that all high school students need exposure to CTE courses while in high school to obtain skills that will make them ready for their future jobs and careers.

Participants in the Masterful Maestros focus group indicated that the leadership in a high school had a direct effect on programs offered to students. Focus group members acknowledged the impact that the MMC has had on CTE and course enrollment, but they also indicated that the attitudes and beliefs of the current and recent past administration have had an effect on CTE at the high school. One Maestro noted, “I think the principals need to know that they have a big role in driving all of our curriculums, whether they think they do or not” (R102). Several members of the Maestros group noted that the current principal is supportive of CTE programs. This is noteworthy, as many stakeholders in the community believe that CTE is not as important as it once was for students. They support the attitude of the former principal for core academics and for dual enrollment. Another Maestros member asserted, “I think he [principal] is in support. He sat down with us and said that he wants to build the CTE programs again here” (R104).

Most participants noted that optimism exists within the confines of the MMC to give students at the high school opportunities to enroll in CTE courses. One member of the Conclave Group stated, “We are not going to change the MMC, so what can we affect? We can still seek partnerships – look at green technology projects, and things like
this” (R604). Participants in the Student Scholars (dual enrollment students) and the Enthusiastic Technetronics (CTE students) focus groups indicated that they recently noticed promotional flyers and information on the school monitors about CTE programs in the high school. Participants also noted that the counselors visited their language arts classes to promote CTE classes and programs in the school and at the Career Center. One participant in the Technetronics group stated that, “The school is so different with the new principal – it is better, no one ever came to my class and I never saw things about the Berry Center or Career Classes on the TV monitors before” (R404).

Several participants stated that their relatives took auto, business, and medical classes in high school, and that they wanted to take the same type of classes. Participants in the Student Scholars (dual enrollment students) and the Technetronics (CTE students) focus groups noted that their parents or relatives owned businesses near the high school, and they were interested in learning things related to the business while in high school. Other participants in the Dual Enrollment and the CTE student focus groups stated that their relatives were in the medical field, and that they wanted to take CTE courses to gain exposure to material and the content in this area. A Technetronics CTE Student noted, “I wanted to take technology classes to see what it is like, to get to know about it now, I want to be in the advanced design classes next year” (R402).

Several participants in the Technetronics focus group stated that the CTE classes gave them a head start on helping them decide on a career. “It actually gives you a start, like where to start off from. Most kids are completely clueless, or confused. With these classes, you have a background to prepare for what is next” (R403).
Participants in the Authority Figures and the Proactive Progenitors focus groups acknowledged the importance of the MMC, but they also noted the importance of students in high school learning valuable skills to be successful at work. They were concerned that students lacked exposure in high school because of the MMC requirements. One member of the Proactive Progenitors focus group noted that students should not have to wait until after they graduate from high school to get an idea of what they want to do as adults. She and members of the group stated that, prior to the MMC, students could enroll in CTE courses, explore careers, and even find work in the career areas that would help them earn income to earn a college degree. “Kids need to explore or know this is the field they want to go into as a nurse, nurse aid, auto tech, manufacturing, or wood shop. I think taking CTE classes while in high school, in the long run benefits everyone” (R502).

**Aggregate Summary and Analysis**

This research study tells a complicated story of the perceptions of students, parents, and faculty members about the impact of the MMC on CTE and dual enrollment at a high school in southeastern Michigan. The increased graduation requirements of the MMC mandate have affected CTE programs nationwide and in the State of Michigan. This impact has been mainly felt in declining CTE enrollments. The MMC Curriculum has increased core academic requirements; hence, the opportunity for many students to elect a CTE course or other elective has decreased. The MMC also included eligibility requirements for dual enrollment participation on the basis of students’ scores on the ACT, PLAN, and the MME (Michigan Merit Examination) tests. Increased dual enrollment opportunities have been made available for many students due to the MMC
mandate. Therefore, the opportunity for many students to elect a CTE course or other elective becomes less likely.

This qualitative bounded case study used focus group interviews to examine the perceptions of students, teachers, parents, and key administrations in a southeastern Michigan high school about how the MMC affects students’ performance and outcomes as it relates to CTE and dual enrollment.

Meaning is also drawn from the participants based on their experiences. This multilevel analysis is based on participants’ personal, professional, cultural, and family experiences. There were many cultural dynamics that framed the responses of the participants. The responses shaped the perceptions mainly in the Proactive Progenitors, Enthusiastic Technetronics, and Student Scholars groups. The Middle Eastern cultural influence is reflected in the perceptions and responses of many of the participants. The Muslim religious beliefs are also reflected in some of the responses. Several of the Technetronics members noted that their relatives had an influence on them being enrolled in CTE classes.

The southeastern Michigan high school community is known for being heavily populated with small business owners and auto shop and service station owners. This cultural dynamic addresses the interest and support for CTE, business, and auto tech offerings for students at the high school. Students in the Student Scholars and Technetronics groups noted that they have relatives who are medical professionals in the school community. These responses support the cultural and ethnic beliefs and attitudes that also exist at the school and in the community for higher education, dual enrollment, and advanced degrees. The commitment to live and work in the Arabic community is also
reflected in numerous signs on the east side of the city that advertise in Arabic the names of local physicians, attorneys, accountants, and so on.

It has been said that the expectations of dual enrollment is built into the culture at the high school. The fact that so many of the parents expect that their children will take numerous dual enrollment classes at the local community college surely shaped their perceptions and responses related to dual enrollment. The strong cultural ties to the Arabic community are also shown in the support of the local colleges and universities. The Arabic and Muslim culture does not strongly support the attendance of Arabic males and especially Arabic females in college outside of the local community or residing on college campuses. The responses indicated a great deal of support for dual enrollment. However, there were many dissenting voices across the focus groups about college courses taken while in high school.

The cultural and ethnic participation was less robust in the Maestros and the Conclaves focus groups. However, a few cultural and ethnic dynamics were noted in these focus group discussions. An Arabic member in the Maestros group noted that many of the students at the high school are recent immigrants and struggle with the English language. She noted that she wanted the group members to not forget these students at the school that struggle with the demands of the MMC. An Arab-American member of the Conclaves group spoke in a very similar tone regarding students at the school who want to pursue careers in auto technology and business. He reminded us of the family expectations and the students’ desire to follow in their relatives’ footsteps. He implied that this is still a big part of the culture and expectations at this particular high school.
Thirty-one participants, including parents, students, and faculty members, shared their perceptions and understanding of the issues particular to the MMC. The focus group interviews informed me of how student needs, parent preferences, faculty perspectives, and the educational criteria of the MMC has shaped their understanding of its positive points and negative drawbacks.

A summary and analysis of the focus group interviews follows:

Many focus group participants expressed concerns that no specific process or criteria has been established to determine student eligibility for dual enrollment. Participants indicated that many students who are taking dual enrollment courses are not ready for the experience. They felt that the school district should develop criteria to establish guidelines for students to qualify and participate in dual enrollment. The high school has been following the law as prescribed in the Postsecondary Enrollment Options Act (Act 160 of 1996) and ACT scores to qualify for dual enrollment (See Appendix E). However, I found that school officials at the high school did not have a clear understanding of the rules related to the Postsecondary Enrollment Options Act. A general understanding exists about dual enrollment. However, there appears to be confusion regarding the cut scores needed on the PLAN, ACT, and MME to qualify students for dual enrollment. This misunderstanding has added to the lack of clarity regarding the rules surrounding dual enrollment. Therefore, focus group participants in all groups expressed concerns regarding dual enrollment – on understanding the rules, expectations, and outcomes for students who participate in dual enrollment.

In the focus group discussions, the majority of participants agreed that more rigor was needed in the high school curriculum, but many felt that the MMC is too rigid and
that it is not in the best interest of many high school students. Several focus group participants expressed concern that the MMC could cause more students to experience academic difficulties. The feelings that students need both the rigor of the MMC coupled with more flexibility in the curriculum are both valid points. However, the likelihood that the MMC will be amended to address these or other concerns is yet to be determined.

Several focus group members noted they would like to see the MMC offer more flexibility for certain students, especially those students who have not committed to a four-year college education immediately after high school. Two focus group participants in the Authority Figures focus group noted that students with an identified career or college interest should be able to have more choice in the core requirements and in the electives that they take. They felt that, ultimately, many of these students might not graduate from high school.

Participants agreed that Michigan residents, as a whole, needed to change their ways of thinking related to reliance on the auto industry and manufacturing and to focus more on knowledge, academics, and even on providing services. Several focus group members commented on the need for students to be able to compete in the global marketplace. Many participants perceived that the MMC was needed to raise academic standards in Michigan high schools. The feelings that students need the MMC to gain the background knowledge to pursue postsecondary education and to compete in the marketplace are very legitimate concerns. The findings as a whole also supported the need for more flexibility in the MMC in order to meet the needs of many of the students at the high school. However, as stated earlier, the likelihood that the MMC will be changed to address the lack of flexibly is yet to be determined.
Several participants expressed concerns that with the MMC’s focus on math, science, and language arts, elective courses such as CTE appear to have nothing to add to a high school student’s education. This supports many of the dissenting voices and attitudes regarding CTE courses and experiences. Most focus group members thought that the hands-on experiences in many of the CTE courses gave students opportunities to gain the knowledge and skills that allowed them to be successful and excel in math, science, and language arts. Several focus group members noted that the focus is all on the MMC and that CTE and other electives are not looked as being very important anymore. The decline in CTE enrollment, resulting in the loss of CTE classes and programs, was noted in several of the focus groups. However, many focus group members in all of the focus groups noted that students need exposure to CTE courses in high school in order to make well-informed decisions related to their jobs and careers. CTE is acknowledged as a viable option for students in the MMC policy mandate. However, it is difficult for many students, who would benefit from the CTE courses, to enroll in them. This difficulty occurs because many of these students have experienced difficulty in passing their MMC core classes and, therefore, have no room in their schedules for CTE or other elective classes.

**Sensitivities and Disconfirming Evidence**

Several hidden sensitivities were revealed during the focus group interviews. The CTE teachers were very confident and positive during the focus group interviews. However, the perception that CTE is looked upon as second in importance to academics was confirmed in several of the focus group interviews. It was noted in the Authority Figures focus group and in the Masterful Maestros discussion that CTE was looked at as
not as important as the MMC core curriculum courses. It was apparent that focus group members in CTE situations are very sensitive to that image, and they engaged in discussion about how CTE is important to the students in the high school.

The other hidden sensitivity was about the influence that the former principal had on the current state of dual enrollment at the high school, and the loss of CTE programs and staff members. This hidden sensitivity was noted by a member of the Conclave group. One Masterful Maestros focus group member also noted the impact of the former principal’s leadership on the loss of CTE programs and the increased focus on dual enrollment. However, it was stated in the interview that the moderator and others in the Maestros group were aware of the impact that the former principal had, but no further discussion ensued about it at that point.

Several matters of disconfirming evidence were found. I felt that the CTE teachers (Maestros) would focus on the increased importance of dual enrollment at the high school for eroding their CTE programs. Although the teachers discussed dual enrollment and its impact on CTE, they focused on how the combination of dual enrollment and the implementation of the MMC has impacted CTE in a negative way.

According to the Summary of Findings Related to Emerging Themes seen in Figure 2, the student groups, Enthusiastic Technetronics and Student Scholars, provided some disconfirming evidence. Several members of the Technetronics group noted that they have accepted the MMC and that students at the high school can meet the demands of the MMC. Those students felt that their classmates need to stop making excuses and take advantage of the support offered to them at the school for them to be successful.
Finally, the Conclaves group, as shown in Figure 2, provided less evidence of support or loss of CTE and elective programs in the school. I feel this was due to lack of homogeneity in this group. This also is likely due to lack of discussion in this group about the issue of loss of CTE and elective programs. The few comments that ensued in the Conclaves group regarding this issue came from one administrator in the group who was in support of CTE and elective experiences for students at the school.

**Cognitive Dissonance**

People tend to seek consistency in their beliefs and perceptions. Cognitive dissonance is described as what happens when one of our beliefs conflicts with another previously held belief. It is used to describe the feeling of discomfort that results from holding two conflicting beliefs. When there is a discrepancy between beliefs and behaviors, something must change to eliminate or reduce dissonance. Cognitive dissonance plays a role in many value judgments, decisions, and evaluations. Being aware of how conflicting beliefs impact the decision-making process is a way to make rapid and often more accurate choices (Cherry, 2011).

Numerous incidents that reflected attitudes of cognitive dissonance were revealed during the focus group interviews. It was found in all of the focus groups that members felt that CTE was important and that students at the high school should have an opportunity to enroll in CTE classes. However, dissonance was noted when one of the parents in the Proactive Progenitors focus group indicated that she felt the CTE classes and experiences were good for many of the students at the school, but that her child was enrolled in the district’s math, science, and technology center and had taken few if any CTE courses. The Proactive Progenitor implied that her child did not have any interest or
room in her schedule for CTE classes. On the other hand, there was a parent who expressed frustration that her son had to enroll in numerous MMC core courses despite his interests in auto technology. This is another example of dissonance. This parent acknowledged the need for more rigor and general acceptance of the MMC. However, she felt that her son should have more of a choice in the classes that he takes.

Students in the Student Scholars group who took advanced core dual enrollment courses also expressed feelings of dissonance. Several students in this group indicted that the CTE classes are nice, but they are only interested in taking challenging dual enrollment classes. They also expressed interest in the advanced placement classes that are offered at the school in order to obtain college credit.

Feelings of cognitive dissonance were apparent based on comments from several focus group members. Members of the Masterful Maestros and several members of the Authority Figures group indicated support for the increased rigor of the MMC. However, they noted conflicting knowledge, attitudes, and beliefs regarding the MMC. These mixed feeling were likely because of their strong beliefs in the benefits of CTE classes and experiences for students at the high school.

Finally, many comments were made in several of the focus groups regarding the attitude of the former high school principal. The former school administrator displayed a lack of support for CTE. It was expressed by members in the Masterful Maestros group and by several members in the Authority Figures group that it was frustrating not to have the support of the principal for CTE. However, they felt that he had to focus on the demands of the MMC, NCLB, and AYP for the good of the entire school. It was noted by members of the Masterful Maestros group that the former principal was a former auto
technology teacher who supported CTE prior to the MMC becoming a mandate in the State of Michigan. This appeared to add to the teachers’ frustrations. Therefore, it could be interpreted from their comments that the former principal was likely uncomfortable holding these types of conflicting beliefs simultaneously. Therefore, the former administrator’s motivational drive to reduce the dissonance resulted in a change in his attitude, beliefs, and actions to support the MMC and focus less on CTE.

In conclusion, one Masterful Maestro member commented, “This could have really been a complaint session, and I think we did a pretty good job of touching on the things that really concern us” (R102). This comment was very powerful. It seems to mean that for members of the Maestro group and from the comments of several focus group members that support the study’s themes of Acceptance of the Status Quo, Need for Flexibility, and Support for CTE Jobs and Careers dissonance has been reduced as they have accepted and justified the need for the MMC and for CTE experiences for students at the high school.

**CTE and Dual Enrollment Course Selection Data**

One of the reasons for conducting this research was to determine how the MMC was perceived to influence dual enrollment or CTE course taking at the selected southeastern Michigan high school. Lazaros and Rogers (2006) found that increased high school graduation requirements could affect the enrollment in CTE programs. CTE stakeholders are voicing concerns that mandated graduation requirements and revised rules for dual enrollment based on the MMC may result in the loss of CTE students, teachers, and classes. CTE state-approved and non-state-approved programs at the high
school were analyzed from 2006 to 2011. CTE course enrollment has declined since 2006 (See Appendix F), the year the MMC was mandated (Zangle, 2010).

Dual enrollment participation at the high school has grown since 2007 (See Appendix G). Students at the high school were enrolled in up to 999 dual enrollment classes in 2008 shortly after the state released the dual enrollment eligibility rules. A decline in the number of dual enrollment classes occurred in the second semester of 2010. At this time, 773 students participated in dual enrollment at the high school. However, an increase in the number of dual enrollment courses occurred during the first semester of 2011. Approximately 851 students participated in dual enrollment at that time (Zangle, 2010).
Figure 2. Summary of Findings and Findings Related to Emergent Themes
Summary

Findings from the six focus group interviews were presented in Chapter 4. The themes that emerged from the data were narrowed into five categories: transparency and communication regarding concerns about dual enrollment, loss of CTE students and programs, acceptance of the MMC, lack of flexibility with the MMC, and the need for CTE to prepare students for jobs and careers. Conclusions related to the findings and themes are reported in Chapter 5. In addition, recommendations are made for practice, implications for education are suggested, and recommendations for further research are presented.
Chapter 5: Discussion

The purpose of this qualitative bounded case study was to investigate how the impact of the MMC as an educational reform policy influences dual enrollment and CTE in a southeastern Michigan high school. This study also examined the perceptions of students, parents, faculty, and administrators about the impact of the MMC on student performance and about problems and politics that have developed due to the MMC.

A summary of the study including findings and conclusions is presented in this chapter. I will make recommendations and identify implications of the study. This chapter is divided into major sections that include (a) focus group findings, (b) possibilities based on recurring themes, (c) recommendations for practice, (d) implications for educational leadership, and (e) recommendations for future research.

Focus Group Findings

Research and focus group responses provided the foundation to determine the impact of new high school graduation requirements in the Michigan Merit Curriculum (MMC) on Career and Technical Education (CTE) in a southeastern Michigan high school. Most focus group participants’ responses revealed a general overall support for the MMC as a viable reform policy. This support by most respondents in all of the focus groups centered on agreement that rigor needed to be added to the curriculum in the high school to allow students to compete globally. The participants’ responses indicated that the MMC also prepared students for postsecondary educational experiences. Participants agreed that the MMC appears to look at all students as being the same, and assumes that they all come to high school with the same skills and abilities. Results revealed that students not interested in a four-year college degree were also being prepared by the
MMC for necessary postsecondary educational experiences. I found that participants agreed with the MMC as a high school reform policy; however, there was a strong desire among most members that adjustments should be made to make the MMC more applicable to the needs of all students.

Results also indicated agreement with the opportunities provided by the MMC for students to qualify for dual enrollment. Several participants added a caution to the MMC’s dual enrollment eligibility requirements. Suggestions were made to limit dual enrollment to students who were ready for the college experience and those who were more likely to earn postsecondary credit while in high school. I found that school officials do not appear to have a clear understanding of the rules related to the Postsecondary Enrollment Options Act. This lack of clarity has added to the many misconceptions surrounding the rules related to dual enrollment at the high school.

The focus group interviews and the examination of the high school’s enrollment data (Zangle, 2010) revealed a decline in CTE course offerings and programs. Responses from the participants noted that many students could benefit from enrollment in CTE courses to prepare them for jobs, careers, and the workforce. Many of the responses in the focus group discussions voiced concern that the major focus of the MMC is on academics. The MMC does acknowledge CTE as a viable option for students. However, there were comments from a few of the participants that did not support CTE courses. Those participants also revealed that the CTE courses were mainly for the other students who are not on the college prep track. It is very difficult for many students who could benefit from the CTE classes to enroll in them because they cannot fit the classes into their schedules. Respondents were optimistic that the new school administrators provided
support for CTE courses in the high school, and believed that additional CTE offerings would be available for students in spite of the MMC requirements.

Focus group comments indicated concerns about local politics surrounding CTE, dual enrollment, and the MMC at the local level. Participants noted that many of the important decisions at the local level currently are being made by individuals and groups who are not educators and who were out of touch with what the true reality was in the high school and in the school district.

Most members of the focus groups noted that they felt that more rigor was needed in the high school curriculum and in all high schools in the State of Michigan. However, participants would like to see modifications made to the MMC that could allow for more flexibility for students who were not as academically inclined, and to allow students to take additional electives such as CTE. The perceptions of the participants that students need more rigor and flexibility in the MMC are valid. However, the likelihood that the MMC will be amended in the very near future is yet to be seen. Participants indicated that they were not sure that these modifications would ever be made.

**Possibilities Based on Recurring Themes**

Six focus group interviews were held at the high school to obtain information about stakeholders’ perceptions of the MMC and its impact on CTE and dual enrollment. Five themes emerged from the data gathered from the focus group interviews. Results of the study were organized according to the research questions. The following are the findings and the possibilities based on the research questions. These findings and possibilities are then related to the recurring themes.
Research Question 1:

How do the students, teachers, parents, and administrators perceive how the MMC influences student performance and outcomes (e.g., course selections, increased graduation requirements, perceptions of rigor and postsecondary credit earned?

Theme: Acceptance of the Status Quo

The results indicating acceptance of the MMC addressed this research question. Most of the focus group participants agreed that more rigor was needed in the high school curriculum. The State of Michigan, like other states, increased requirements to earn a high school diploma as part of high school reform efforts. Recent educational research (Shahiani, 2006) found that the strongest predictor of college graduation is whether students complete a rigorous course of study in high school. Results in this study indicated that most respondents thought that the MMC has introduced more rigor into the high school curriculum. This tells us that many of the focus group participants agreed that a more challenging curriculum was needed to meet the changing economic climate demands in Michigan, where the state is moving from a manufacturing environment to a knowledge-based economy.

Former Michigan Governor Granholm noted that one reason for mandating the MMC was to focus on links between earning and learning and advanced education. She stated that it is important for everyone to pursue education after high school (Bureau of Labor Market Information Strategies and Initiatives, 2010).

Drawing on the perceptions of students, parents, teachers, and administrators in focus group interviews, this study produced three different themes related to the ways the MMC influences student performance and outcomes: (a) The focus of the MMC on
academics and college preparatory curriculum for all students in the high school is an unrealistic expectation for many students, (b) the MMC limits course selections, and (c) the MMC provides opportunities for students to dual enroll and earn postsecondary credit.

Despite the controversy of the applicability of the MMC for all Michigan students, Governor Jennifer Granholm signed the MMC into law in 2006. This law changed the high school curriculum, resulting in major shifts for school districts in the State of Michigan. Many felt that high school reform must proceed to improve achievement, reduce achievement gaps, and better prepare students for postsecondary and career success (Bartik & Hollenbeck, 2006). Respondents in this study expressed concern that the focus on academic core courses limits students’ courses selection and that students have fewer electives from which to choose. Many who failed courses were even more limited in courses to select.

Perceptions regarding opportunities for students to earn postsecondary credit through dual enrollment in college courses were generally positive. However, teachers and administrators noted that many students who enrolled in college classes might not have been ready for the experience. Hence, concerns were noted about the ACT, PLAN, and MME scores that determined eligibility for dual enrollment. This tells us that students could benefit from participating in dual enrollment as they can begin to understand the difference between college and high school. Bailey, Hughes, and Karp (2002) noted that dual enrollment gives students a means to understand what is expected of them in postsecondary education.
Research Question 2:

How do students, teachers, parents, and administrators perceive the effect of the MMC on dual enrollment or CTE course-taking?

Theme: Loss of CTE and Elective Programs

The mandates of the MMC have resulted in negative consequences for CTE programs in the high school. These consequences included loss of enrollment and programs and reduction of CTE teachers. The domino effect of a loss of students, teachers, and classes or programs was described by Lazarus and Rogers (2006). Comments from several respondents revealed that the MMC drives the need for more academic courses leading to fewer CTE and elective courses in students’ schedules. Hence, CTE course and elective course enrollment and programs have declined substantially at the high school. Figure 3 illustrates the enrollment trends in the CTE programs.
Both non-approved and state-approved CTE programs saw declines in enrollment in 2008, the year that the MMC was implemented for the first set of graduates in the year 2011. Statistics also supported findings from the focus groups that many students enrolled in CTE courses as a related class that was required for seniors who were enrolled in co-op or work experience programs. Most of these courses were introductory courses that were not state-approved. Data also validated findings from the focus group of CTE teachers who noted that they were having difficulty filling their advanced and state-approved CTE courses following the MMC mandate in 2006 (See Appendix F).

The Michigan Department of Education (2008) provided schedules for high schools to illustrate how schedules could be developed for students who are interested in CTE or other electives, such as band. However, these schedules suggested and supported
the research study’s results that these sample schedules were not effective in helping students who had failed MMC courses. It also illustrated that these suggestions were not helpful to students if they were entering the high school from other countries and were deficient in credit.

Theme – Transparency and Communication for Dual Enrollment

The MMC determines scores that students must achieve on the ACT, the MME, and the PLAN to be eligible for dual enrollment. Based on several focus group comments, the revised cut scores for dual enrollment allowed many students who would normally have elected to take CTE courses to dual enroll in college courses instead. This indicates that the MMC could negatively impact CTE course-taking possibilities for students and also supports the findings of the focus groups interviews that showed that achievement on a test score is not sufficient to determine if a student should be eligible to take college courses. In addition, many students who had selected dual enrollment were truly not ready for the college experience. However, several focus group members also believed that the majority of students who were participating in dual enrollment were benefiting from the experience. Golann and Hughes (2008) stated that students who struggled academically, or were at risk of dropping out, could benefit from dual enrollment. Other benefits of dual enrollment included increasing academic rigor, helping low-performing students, providing additional opportunities for electives and academics, introducing students to college life, and reducing the cost of college (Karp, Calcagno, Hughes, Jeong, & Bailey, 2007).
Research Question 3:

What are the perceptions among stakeholder groups regarding how the MMC and dual enrollment have affected CTE?

Five of the six stakeholder focus groups were homogeneous focus groups. The one stakeholder group that was not homogeneous was the Conclave (combined) focus group. This group consisted of two students, two administrators, two parents, and one CTE teacher.

Theme – Acceptance of the Status Quo

Generally, results from the Conclave stakeholder group were similar to the other stakeholder groups regarding participants’ perceptions of the effect of the MMC and dual enrollment on CTE. All stakeholder groups indicated an acceptance of the MMC. One observation was that the combined stakeholder group appeared to be more reserved in many of their responses, especially in regard to the focus group guide questions about politics and advice given to school officials regarding CTE, dual enrollment, and the MMC.

The tendency of the combined focus group was to be not as open as the other groups. This difference was likely because the group was not homogeneous and the members were reluctant to be as open as in the other focus groups that were homogeneous. The combined group included administrators, which could also have influenced the responses or lack of responses.

Another difference among the stakeholder groups was in regard to how the MMC and dual enrollment had impacted CTE. The Masterful Maestro, Enthusiastic Technetronics (Dual Enrollment Students), and the Proactive Progenitors focus group
responses to the questions were limited. The responses from these groups to questions were likely due to the participants’ limited knowledge regarding the MMC. All focus groups used the inclusive approach (Morgan, 1997). Data were collected from the stakeholder groups through group interactions. Findings among the groups were slightly different because of the participants’ knowledge of the MMC and whether the focus groups consisted of heterogeneous or homogeneous stakeholders.

Research Question 4:

What is the perception of the MMC as a viable educational reform policy to strengthen high school graduation requirements?

Theme: Acceptance of the Status Quo

Results from the focus groups indicated that the MMC was a viable educational reform policy because it (a) added more rigor to the high school curriculum, (b) allowed students to compete globally, and (c) moved all students closer to pursuing education after high school.

The Cherry Commission was charged with doubling the number of people with postsecondary degrees in Michigan. The MMC was mandated to reform high schools by improving student achievement, reducing achievement gaps, and preparing students better for postsecondary and career success (Bartik & Hollenbeck, 2006). The participants indicated that they would like to see greater flexibility in the MMC, but they also asserted that the likelihood or this change occurring was not good. Hence, this also indicates that participants had accepted the MMC. The focus group members agreed that the MMC added needed rigor to the high school curriculum. They indicated that rigor was needed for students to be able to compete globally. The participants asserted that a
connection exists between what students learn and their ability to earn a living. Finally, this tells us that the MMC was considered a viable educational reform policy because it moved students closer to pursuing education beyond high school. Focus group members voiced concerns that the MMC was preparing all students to go to college, and that this outcome was not realistic. However, the focus group members thought that the MMC was realistic in preparing students to pursue some form of education beyond high school (e.g., job preparation, two-year college programs, and so on).

*Theme: Support for CTE, Jobs, and Careers*

The first federal legislation, the Smith-Hughes Act of 1917 involved vocational education (Cohen & Besharov, 2002). This early legislation was designed to train immigrant workers in rural areas to work on farms and in factories (Silverberg, Warner, Fay & Goodwin, 2004). Over time, vocational education became more attractive to students who were not academically inclined. Other federal legislation acts, such as the Vocational Education Act of 1963, funded construction of area vocational schools and made provisions for disadvantaged and disabled students (Gordon, 1999). The early Carl D. Perkins Vocational Education Acts continued to provide support for vocational education programs. The trend with Perkins legislation has been to continue to support every student being taught skills that gave them the opportunity to enter the work force. The Tech-Prep legislation began in the mid-1990s and continues today to provide linkages between secondary and postsecondary education (Hayward & Benson, 1993). This legislation shows that provisions were made in the MMC legislation to support CTE for students in Michigan. This support is exemplified in the awarding of some academic credit in CTE programs by the Michigan Department of Education (MDE). A student is
allowed to receive credit for algebra or geometry in a construction trades program if the school district determined that the construction trades program covers the Michigan Content Expectations for algebra or geometry courses (MDE, 2008).

Other examples of support for CTE in the MMC are demonstrated by the MDE offering sample schedules that incorporate CTE. MDE offered sample schedules in support of CTE programs despite the perceptions that CTE options should be limited or reserved for the students who are not pursuing four-year degrees. The MDE also offers illustrations of how four X four, or A/B block trimesters, and zero and seventh hour options allow additional ways for students to gain exposure to CTE courses. However, these illustrations support the focus groups results about concerns that students, who typically enroll in CTE courses, were unable to fit CTE in their schedules because they failed MMC core courses. The focus group members acknowledged strong support from the new school leadership at the high school for CTE. Hence, the participants were optimistic that CTE courses and enrollment could begin to trend upward.

*Theme: Need for Flexibility*

According to several group members, greater flexibility is needed in the MMC to deliver the rigor of the MMC and to provide CTE and other elective offerings, which could strengthen high school graduation requirements. However, many focus group respondents were not optimistic that changes in the MMC would occur in the near future. Therefore, most respondents appeared to have accepted the mandate and were ready to take advantage of the internal support measures offered at the high school. They felt that these measures could enable many students to graduate and earn a high school diploma. The respondents also expressed commitments to use mechanisms offered by the school
and the school district, such as supplemental funding sources [added cost funding] and partnerships with the local business community, such as green energy initiatives, to fund CTE-type project-based learning programs.

**Recommendations for Practice**

The recommendations for practice were developed from the emergent themes, research findings, and focus group data. The recommendations include: (a) Expand and promote CTE course and program offerings for students in the high school, (b) offer academic credit (MMC) in CTE classes, (c) expand articulated and escrowed college credit offered in CTE courses, (d) expose students to advanced CTE classes and programs at the high school and at the district career center, (e) make the criteria for dual enrollment more transparent and communicate the criteria to all stakeholder groups, (f) expand the advanced placement course offerings to students at the high school, and (g) expand the interventions that are currently offered to students to assist them in meeting the MMC requirements.

Additional recommendations tied to the study’s emerging themes include: (a) Make the MMC more functional and applicable for a wider range of students, (b) track and follow all cohorts of MMC graduates, (c) ensure that schools and school districts are following the rules related to dual enrollment, as stated in the Postsecondary Enrollment Options Act of 1996, and (d) offer an incentive to students who meet the MMC requirements similar to the Promise Scholarship.

A recommendation for stakeholder groups at the high school is to expand, promote, and support CTE programs for students. Focus group findings indicated a need and desire to bring back many CTE classes and programs in which students had enrolled.
in the past. The suggested programs are marketing education classes and the school store lab associated with the marketing classes. The career and technical education student organizations (CTSOs), such as an Association of Marketing Students (DECA) and Business Professionals of America (BPA), are needed to complement the CTE competencies that the students would learn in the classroom. The majority of CTE programs are associated with laboratories and career and technical student organizations. The labs and organizations provide hands-on, real-world work, and soft skills experiences for students. Responses from several of the groups indicated that administrators were supportive of returning the lab experiences to the school. These laboratories and student organizations are recommended components of complete CTE programs. Students are very interested in being involved in DECA, BPA, and the school store, and these groups and organizations are a good way to promote and recruit students for CTE programs.

Several state-approved CTE programs at the high school were approaching the end of the three-year window of time in which they could obtain added-cost funding for offering classes to students. Priority in the school schedule should be given to state-approved CTE courses that have not been offered recently, but are still eligible for added-cost funding. These state-approved courses could generate funding for the school and the school district and assist with the additional expenses associated with running these types of CTE courses. If new CTE courses or programs are to be offered at the high school, school officials should consider applying for added-cost funding for these programs where appropriate.

Another recommendation is to award MMC credit in CTE programs where appropriate. In most cases, a co-teaching model could be used that includes a CTE
teacher and a teacher certified in math, science, or language arts working in conjunction. CTE standards and benchmarks must be taught alongside the standards and benchmarks of the MMC classes if students are awarded academic credit. The MMC allows local school districts to award academic credit in elective courses, such as CTE (MDE, 2008a). CTE classes that qualify to meet the MMC requirements could assist in eliminating some reductions in CTE programs, although this is not likely to halt the overall decline in CTE course offerings.

A recommendation is made to expand articulated and escrowed college credit offered in CTE courses. Many advanced CTE programs at the Career Center and those at the high school are Tech Prep courses. These advanced course offerings are integrated and articulated with local and postsecondary technical programs throughout the State of Michigan. These programs prepare students to make the transition to postsecondary and pre-baccalaureate technical education. The articulated and escrowed credit programs offer students the opportunity to earn college credit while in high school. Using a longitudinal study, Gray (2002) found that the majority of all Tech Prep concentrators go on to college, with more than half of these students enrolling in two-year associate degree programs.

Another recommendation is to expose students to advanced CTE classes and programs and to continue to encourage students to enroll in advanced CTE programs at the high school and the district’s Career Center. Responses from the focus group indicated that enrollment at the Career Center also suffered due to MMC. Responses from the focus group participants noted that the advanced CTE programs at the Career Center also were impacted because of a lack of support from administrators at the high school.
Focus group members were in agreement that new administration at the high school was supportive of programs at the district’s Career Center.

A recommendation is made to make the criteria for dual enrollment more transparent and to communicate the criteria to all stakeholder groups. The MDE provided the eligibility scores and a copy of the Postsecondary Enrollment Act 160 on its website (See Appendix E). The focus groups acknowledged a lack of understanding about dual enrollment eligibility and concerns in regard to the caliber of students who were dual enrolling in high school and college courses. Recommendations to make the dual enrollment process more transparent should involve holding required parent/student informational meetings and communicating rules, such as registration dates, through school newsletters and on the electronic monitors throughout the school. These communication tools can help minimize many concerns expressed by stakeholders in the focus group discussions.

Expand the Advanced-Placement (AP) course offerings to students at the high school is another recommendation. Students currently have opportunities to earn advanced placement credit English, government, calculus, and other subjects. However, as the number of students participating in dual enrollment has grown over the years, the advanced placement offerings at the school have not. Responses noted repeatedly that many students at the high school could benefit from remaining on the campus during the school day. Offering more advanced placement experiences such as AP biology, AP statistics, AP environmental science, and so on, could give the students an opportunity to earn postsecondary credit while remaining on the high school campus.
An additional recommendation is to expand and promote the interventions that currently are offered to students to assist them in meeting the MMC requirements. Many support mechanisms and interventions are currently available at the high school to support student success in MMC courses. These supports include tutoring, bilingual student/parent liaisons, credit recovery programs (Nova Net and E2020), summer school, night school, Carnegie Math, and so on. Members of the parent focus group noted that they were not familiar with some of these programs and/or they were not in a position to be able to afford the interventions or support that involved money. The high school offered support through Title I and free or reduced lunch eligibility for families that qualify. School newsletters and electronic monitors currently promote the support and assistance that is available to students. All stakeholder groups should be aware of the interventions available to the students.

Five cohorts of high school students have now taken the MME; the first cohort of students required to complete all MMC requirements did so in the spring of 2010. The high school content expectations have been in place for four years. The Grade Level Content Expectations (middle school) have been in place for six years. The Common Core Standards have recently been adopted by the Michigan State Board of Education, based on college and career readiness and becoming college- and career-ready. Based on these policies and benchmarks, the following recommendations are tied to the study’s emerging themes and obtained from the findings and focus group data collection.

Make the MMC more functional and applicable for a wider range of students. The MMC is needed to accommodate the shift from a manufacturing economy to the new Michigan economy. This new Michigan economy reflects college and career
preparedness in high school. One suggestion is to align the MMC requirements with specific college and career goals as identified in a student’s Educational Development Plan (EDP). An example of EDP alignment in math is that students who have identified a career and/or a college goal or interest in business would take an Applied or Business Math course in their senior year. Examples of EDP alignment in language arts include allowing students who identified career and/or a college goal or interest in business to take a Business English course, likely in the senior year in high school. The suggested modifications to the MMC address CTE and other elective program offerings. These recommend adjustments address the issue of declining CTE enrollments.

Track and follow all cohorts of MMC graduates. Collect and examine the data gathered. Assemble or reconvene groups similar to the Cherry Commission, and make adjustments to the MMC policy based on the data. High schools in Michigan currently have to report student data through the Office of Education Assessment and Accountability (OEAA). Schools then provide this information to The Center for Education and Performance Indicators (SEPI). The Michigan Department of Education has access to all of the data that will indicate the status of school districts, students, and high schools regarding how successful students have been with meeting the requirements of the MMC. I am recommending that the Michigan State Superintendent of Instruction reconvene a group or groups similar to the Cherry Commission in the next two to three years. This group would look at the data and make recommendations to the state superintendent and the Michigan State Board of Education regarding making any necessary adjustments or amendments to the MMC.
Ensure that schools and school districts are following the rules related to dual enrollment as stated in the Postsecondary Enrollment Options Act of 1996 for students who are participating in dual enrollment. A grade point average requirement could be attached for students who do not meet the grade point average requirement. I also recommend that students who participate in dual enrollment must present a deportment record that demonstrates no severe disciplinary infractions. As with the grade point average requirements, an appeal process should be established for students whose disciplinary record fails to meet the established requirements.

Offer an incentive to students who meet the MMC requirements similar to the Promise Scholarship. I am recommending that the Michigan Department of Education offer an incentive to students who successfully complete the MMC and the MME. This incentive could be similar to what was offered in the past for students that were successful in passing the MEAP examination. Another recommendation is that all school districts in Michigan require that students take all parts of the MME to receive a diploma. These proposed recommendations further strengthen the importance of the MMC to earning a high school diploma and help to lay the foundation for the next steps to a postsecondary education. This incentive would be difficult to fund at this time, due to the economic downturn in Michigan. However, cuts in per-pupil funding in Michigan will be less than anticipated for school districts, according to recent announcements. Therefore, as the economy makes its expected upturn and the fiscal position of the Michigan Department Education improves, some type of incentive program that is tied to performance on the MMC mandate could be introduced for high school graduates.
Participants acknowledge that the Michigan Merit Curriculum was needed to raise academic standards in Michigan.

A need for a more transparent Dual Enrollment process was identified.

Findings lead to a recommendation that more flexibility in the Michigan Merit Curriculum is needed to meet the needs of all students.

Highlights the importance of Career Readiness for all students.

Reflects optimism regarding increase in Career and Technical Education opportunities for students.

Provides evidence of the impact of the Michigan Merit Curriculum on Career and Technical Education, Electives, and Dual Enrollment.

Acceptance of the Status Quo

Transparency & Communication for Dual Enrollment

Need for Flexibility

Support for CTE, Jobs & Careers

Loss of CTE and Elective Programs

Authority Figures

Progenitors

Maestros

Scholars

Technetronics

Conclaves

Figure 4. Summary of Findings Related to Themes, Including Recommendations
Implications for Educational Leadership

Vocational training in secondary schools began with training models that were developed to focus instruction based on the needs of industry (Steinke, 2000), and the training in secondary schools was established by leaders in the manual school movement. Therefore, vocational education programs have played a major role in education for many years by providing occupational skills that could assist students in making the transition from school to work by preparing them for entry-level jobs in the workplace (Cohen & Besharov, 2002; Stone, 2005). The economic climate in the State of Michigan has driven legislation to mandate the MMC. This mandate has forced Michigan high schools to develop some of the most stringent graduation requirements in the nation.

If CTE programs in the high school are to continue to remain a viable option for students, administrators, CTE leaders, postsecondary institutional leaders, teachers, and counselors, CTE content needs to be aligned with the MMC standards and benchmarks. CTE classes need to incorporate appropriate academic content, offer credit, and continue to articulate with postsecondary institutions through Tech Prep models (Barnett, 2002). The MMC allows local school districts to award academic credit in elective courses, such as CTE (Michigan Department of Education, 2008a). CTE classes in the high school that meet the MMC requirements could stem some reductions in CTE programs. School administrators and leaders in the school district need to consider awarding academic (MMC) credit in certain CTE courses where it is feasible and applicable. CTE teachers and certain academic core teachers could co-teach courses. Mathematics is a logical place for this co-teaching model. These models currently exist in the State of Michigan. CTE
instructors teach alongside highly qualified mathematics instructors in certain courses, and students are then awarded CTE credit and the appropriate MMC math credit.

CTE programs continue to be perceived by many as being for students who are not academically inclined and for keeping them in school by engaging them in activities most relevant to future employment (Silverberg, Warner, Fay & Goodwin, 2004). However, research has indicated that many students who enroll in secondary CTE programs continue on to postsecondary education (Gray, 2002). Enrollment in CTE programs promotes academic achievement for many students, regardless of their future plans for a career. Students enrolled in CTE classes or programs experience learning opportunities that are different than the those of the traditional student who plans to enter college upon graduation from high school.

Career and technical education programs continue to involve educational, technical, and occupational standards despite the negative perceptions of many stakeholders. Research has shown that CTE programs play key roles in incorporating academic content in real-world applications. However, CTE programs are not just for students who do not plan to pursue postsecondary education. The reauthorization of the Carl D. Perkins Vocational and Technical Acts have supported standards-based reforms and required states to include academic, technical, and occupational standards in core performance indicators (McCaslin & Headley, 1993). Therefore, administrators, teachers, counselors, and postsecondary institution leaders need to encourage students enrolled in CTE programs to dual enroll and pursue post-secondary opportunities to eliminate perceptions of loss stated by focus group respondents. This type of encouragement from
stakeholders will also help to strengthen the perceptions noted by the respondents that CTE is very important to help prepare students for jobs and careers.

Legislators and educators need to determine how CTE programs enable students to meet academic standards, while gaining technical training for post high school careers and postsecondary education. This determination assists stakeholders in seeing the need for CTE and other elective programs, instead of simply increasing academic requirements for core [MMC] courses. Increased academic requirements and the increased emphasis on dual enrollment have come at a cost for CTE programs at the high school. The emphasis of the MMC is on college preparatory-style classes for all students, regardless of their abilities, interests, or skill sets. The MMC also is used to determine eligibility scores for students to dual enroll in college courses, which likely would not have been possible prior to the MMC mandate. These students have replaced CTE courses with dual enrollment courses in their schedules, further eroding CTE enrollments. To address participants’ perceptions of dual enrollment rules and declining CTE enrollment, educational leaders and counselors at the high school need to determine that students are placed appropriately in the dual enrollment classes. Students’ EDPs need to be carefully followed to determine if the appropriate placement is a high school core class, an elective or CTE course, an honors or advanced placement offering.

Dual enrollment participation at the selected southeastern Michigan high school is among the highest in the State of Michigan. This participation is due in part to the arrangement between the school district and the local community college. The school district is one of the few K-14 school districts in the State of Michigan. However, the large number of students earning college credit while in high school has been a tradition
at the high school, even prior to the MMC because of the school’s growing enrollment. Prior to a local bond passed by the voters in 2002 and an addition made to the increase the size of the selected Michigan high school, dual enrollment was used as a tool to accommodate the growing school population.

Dual enrollment programs offer challenging curricula, exposure to a college environment, and an opportunity to earn college credit while in high school. Policy-makers viewed dual enrollment as a means for a broader range of students to attend college, rather than limiting this program to high-achieving students. Dual enrollment is increasing, especially for students who struggle academically and are at risk of dropping out (Golann & Hughes, 2008). The MMC established eligibility for dual enrollment based on ACT, PLAN, and MME test scores. Direct relationships have been found for dual enrollment and several recommendations by the Cherry Commission that resulted in the MMC mandate. Some recommendations made by the Cherry Commission included (a) making higher education universal, (b) setting high expectations for high school students through rigorous standards and curriculum, (c) implementing new strategies for high school success, (d) equipping high school educators to support high expectations for their students, and (e) aligning postsecondary education with economic needs and opportunities (Caine & Barnett, 2005).

The State of Michigan recently joined many states in the movement to increase the rigor in the high school curriculum. These high school reform efforts conducted in several states over the last few decades have ended in mandated curricula. Most educators and legislators agreed that this reform was needed because of current school environments that hinder student achievement and their scores on high-stakes tests.
Federal legislation such as NCLB, that addressed core academic areas, set the stage for
the MMC that was mandated in 2006 for implementation in 2008. Research has shown
that high school reform is necessary to improve academic achievement, reduce
achievement gaps, and better prepare students for postsecondary and career success
(Batik & Hollenbeck, 2006). Based on the focus group findings, participants did not
argue the need for a state-mandated curriculum. However, participants have indicated
that implementing the MMC has proven to be a challenge. They also expressed concern
about the students and their various skill levels, which need to be considered. This
finding tells us that many stakeholders were not happy with the lack of flexibility in the
mandated graduation requirements. Participants suggested that adjustments needed be
made to the MMC, but they were not optimistic that changes in the MMC would occur
anytime in the near future.

Recommendations for Future Research

The review of the literature and focus group discussions provided a foundation for
continued research on the topics addressed this study. The emergent themes collected
from the focus group discussions revealed additional concerns: dual enrollment, need for
flexibility with the MMC, loss of CTE students and programs, need for CTE to prepare
students for jobs and careers, and acceptance of the MMC. Further research is needed
about the influence of MMC on CTE and dual enrollment.

The purpose of this research study was to examine the perceptions of students,
teachers, parents, and administrators regarding the MMC and its impact on CTE and dual
enrollment in a southeastern Michigan high school. The findings of this qualitative
research involved a limited number of participants. The findings are not generalizable to
other high schools and/or CTE programs in the State of Michigan. However, there may be transferability of the results drawn from readers. My recommendations for future research are as follows:

Conduct a similar qualitative study with a narrower focus. This recommendation suggests that further research on the topic of the MMC and its impact on CTE and dual enrollment could be designed. For example, a researcher could conduct a similar qualitative study by exploring perceptions of stakeholder groups of the MMC as an educational reform policy on CTE, omitting dual enrollment. This additional research could be a recommended first step in a broader research effort.

Conduct a similar qualitative study with a broader focus. The study could include the other comprehensive high schools in the school district. A researcher could include the teachers at the district career center, as they teach and interact with students at the three comprehensive high schools. A researcher could also do additional research that would use a quantitative research design employing survey methods. This researcher could be informed by the results of the present study to explore the perceived impact of the MMC from local, state, and or regional CTE students, teachers, parents, and/or administrators. These responses could reveal information and provide details to enhance CTE and dual enrollment programs.

Conduct a larger research effort using survey research methods. A more in-depth research model could be desirable based on the results from this focus group research study. This larger quantitative research method using surveys would allow the researcher to decipher what questions to test or confirm what was learned from my focus group participants with a larger population of multiple stakeholder groups.
Conduct a mixed-method research study. A researcher may find it appealing not to rely purely on either a qualitative or quantitative research method. Future researches could look at intertwining both qualitative and quantitative methods into a single study. For example, a researcher may feel that a mixed-method study would be a powerful way to reach policy-makers with findings based on the rich personal studies that ensued from the focus group research. This idea could be further pursued by combining a statistically valid sample from a larger population of constituents.

This research study can be repeated over multiple years. A researcher could use a longitudinal research design to track changes over time. The researcher could then compare and contrast the results and combine them into a single study.

Conduct a follow-up study. In three to five years, a follow-up study could be used to determine how successful students have been in career preparation and accomplishing their postsecondary goals and plans.

Design and conduct action research projects. A researcher could conduct action research using mixed-methods to use both qualitative and quantitative data. The focus of the research would be on addressing the practical problems in classrooms with teaching and learning that address the MMC, CTE, and dual enrollment. A researcher could recruit CTE and core teachers to be involved in these types of action research processes.

Summary

Conclusions, based on the research interpretations, and the synthesis of the focus group discussions were presented Chapter 5. Recommendations for practice were provided, policy and program recommendations were noted, and implications and recommendations for future research were suggested. Recommendations for practice
included the following: (a) Expand and promote CTE course and program offerings for students in the southeastern Michigan high school, (b) offer academic credit (MMC) in CTE classes, (c) expand articulated and escrowed college credit offered in CTE courses, (d) expose students to advanced CTE classes and programs at the high school and at the district career center, (e) make the criteria for dual enrollment more transparent and communicate the criteria to all stakeholder groups, (f) expand the advanced placement course offerings to students at the high school, and (g) expand the interventions that are currently offered to students to assist them in meeting the MMC requirements. A partial list of other recommendations included, reconvening a group similar to the Cherry Commission to look at the MMC, and aligning the MMC requirements to specific college and career goals.
References


Appendix A: Permission to Use the Facility

Office of Assessment and Evaluation

January 10, 2011

Ms. Winifred Green

Dear Ms. Green,

I have reviewed your request to conduct a research project at [Redacted] High School as part of the requirements for your doctoral degree from Eastern Michigan University.

[Redacted] Public Schools is granting permission to conduct research on a focus group with [Redacted] Career and Technical Education (CTE) and dual enrollment students, parents of the students and teachers in state approved CTE programs. Our district does not permit educational researchers to use instructional time to conduct research activities. However, in order to assist you in completing your degree, we request that you follow the requirements listed below:

1. Meet with the school principal, [Redacted], and provide the details regarding research procedures and data collection as well as the [Redacted] Public Schools Assessment Department.
2. Provide the school principal with copies of parental approval for each participating student in your study.
3. Obtain a building permit for 90 minute meetings from the [Redacted] Public Schools Adult & Community Education Office.
4. Participating students are not to be pulled out of extended day or any other school-related activity or intervention programs.
5. Maintain confidentiality of all information gathered on the participants unless disclosure is given by parents/guardians and [Redacted] Public Schools.

If you have any questions, please feel free to call me at [Redacted]. We wish you success with your research and would be interested in the results of your findings.

Sincerely,

[Redacted]

Coordinator, Assessment & Evaluation

cc: Mr. [Redacted], Superintendent
cc: Mr. [Redacted], Principal
cc: Dr. [Redacted], Associate Superintendent
Appendix B: Informed Consent Forms

Eastern Michigan University
INFORMED CONSENT/ASSENT SCRIPT: Current or Past Students

I am a student at Eastern Michigan University working on a Doctor of Education Degree in Educational Leadership. I am conducting a research study entitled - Perceptions Regarding the Michigan Merit Curriculum Reform Policy, Its Impact on CTE and Dual Enrollment in a Southeastern Michigan high school. Dr. Eboni Zamani-Gallaher (Professor – Department of Leadership and Counseling) is my dissertation chair. The purpose of this research study is to explore student, parent, faculty, and administrator perceptions of the Michigan Merit Curriculum (MMC) as an education reform policy and any influences it may bear on Career and Technical Education (CTE) and dual enrollment.

You were selected to participate in this study because you are currently or were recently enrolled in a state approved CTE or dual enrollment course. I will explain the study to you, answer any questions you may have, and witness your signature to this consent form. Since you are under 18 years of age you will be provided verbal consent assurances to participate in this study and you must have signed approval to participate by your parent or guardian. I will use focus groups consisting of CTE and dual enrollment students, their parents, CTE teachers and building administrators. Each focus group will be conducted separately. The one exception is that one group will be a combined group, consisting of individuals from each of the aforementioned groups – CTE and dual enrollment students, their parents, CTE teachers and building administrators. Information shared in the focus groups may not remain confidential if the participants talk. If you feel uncomfortable sharing your story with the entire group at any time - I can meet with you independently. You will be answering open-ended interview questions in a focus group setting, allowing me to observe your responses. This focus group process will take no longer than 90 minutes. The focus group interviews will be audiotaped. The recordings will be transcribed by me, to insure confidentiality. Your signature at the end of this consent form is giving consent to audio-tape the focus group interviews. You will be asked to complete a participant information form (name optional) asking for program, group, age and race/ethnicity. Upon completion of the information form, you will be given a duplicate copy of this informed consent, which includes follow-up information, if needed. The approximate total time to complete the information forms is only a few minutes.

To protect your identity and to identify your responses a two-digit code will be used. The two-digit sequential code will be used as the participant number. The information will be stored in an Excel file maintained on a password-protected computer. Following acceptance of the completed study, the Excel file will be erased from the computer’s hard drive, thus eliminating any connection between the code numbers and your name. The transcripts and the audiotapes will be stored in a locked cabinet. After four years, these hard copies will be destroyed to protect the participants’ identity. The results will be
stored separately from the consent form, which includes your name and any other identifying information. At no time will your name be associated with your responses.

There are no foreseeable risks to you by participating in the focus groups, as all results will be kept completely confidential. There are no personal benefits to you for participating in this study, but your participation/feedback is valuable because your participation in this study may help add to the literature regarding the MMC, dual enrollment, and CTE.

Participation in this study is voluntary. You may choose not to participate. If you do decide to participate, you can change your mind at any time and withdraw from the study without negative consequences. If you choose to participate or not to participate your grade will not be affected and/or you will not be treated differently by your teacher or any employee.

When the study is complete, you will receive an iTunes gift card for $10. Unfortunately, we are not able to compensate you for your participation, but we do value your input and information.

Results will be presented in aggregate from only. No names or individually identifying information will be revealed. Results may be presented at research meetings and conferences, in scientific publications, or as part of a doctoral dissertation being conducted by the principal investigator.

If you have questions concerning your participation in this study now or in the future, you can contact the principal investigator, Winifred L. Green at [email protected] or via e-mail at [email protected]. This research protocol and informed consent document has been reviewed and approved by the Eastern Michigan University Human Subjects Review Committee for use from [date] to [date]. If you have questions about the approval process, please contact Dr. Deb de Laski-Smith (734.487.0042, Interim Dean of the Graduate School and Administrative Co-Chair of UHSCR, [human.subjects@emich.edu]).
I have read or had read to me all of the above information about this research study, including the research procedure, possible risks, side effects, and likelihood of benefit to me. The content and meaning of this information has been explained and I understand. All my questions, at this time, have been answered. I hereby consent and do voluntarily offer to follow the study requirements and take part in the study.

**PRINT NAME:**

Student Participant:

Parent:

**Signatures:**

Student Participant (your signature) Date

Parent (signature) Date

Investigator or Specified Designee Date
Eastern Michigan University
INFORMED CONSENT: Parent, Teacher, Administrator

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You were selected to participate in this study because you fall into one of the following three categories: (1) You are a parent of a student who is currently or was recently enrolled in a state approved CTE or dual enrollment course at your high school (2) You currently teach a state approved CTE course or (3) You are a building administrator at this school. I will explain the study to you, answer any questions you may have, and witness your signature to this consent form. You must be at least 18 years of age to take part in this study. I will use focus groups consisting of CTE and dual enrollment students, their parents, CTE teachers and building administrators. Each focus group will be conducted separately. The one exception is that one group will be a combined group, consisting of individuals from each of the aforementioned groups – CTE and dual enrollment students, their parents, CTE teachers and building administrators. Information shared in the focus groups may not remain confidential if the participants talk. If you feel uncomfortable sharing your story with the entire group at any time - I can meet with you independently. You will be answering open-ended interview questions in a focus group setting, allowing me to observe your responses. This focus group process will take no longer than 90 minutes. The focus group interviews will be audio-taped. The recordings will be transcribed by me, to insure confidentiality. Your signature at the end of this consent form is giving consent to audio-tape the focus group interviews.

You will be asked to complete a participant information form (name optional) asking for program, group, age and race/ethnicity. Upon completion of the information form, you will be given a duplicate copy of this informed consent, which includes follow-up information, if needed. The approximate total time to complete the information forms is only a few minutes.

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If you have questions concerning your participation in this study now or in the future, you can contact the principal investigator, Winifred L. Green at [greenw@dearborn.k12.mi.us](mailto:greenw@dearborn.k12.mi.us) or via e-mail at [greenw@dearborn.k12.mi.us](mailto:greenw@dearborn.k12.mi.us). This research protocol and informed consent document has been reviewed and approved by the Eastern Michigan University Human Subjects Review Committee for use from January 26, 2011 to January 26, 2012. If you have questions about the approval process, please contact Dr. Deb de Laski-Smith (734.487.0042, Interim Dean of the Graduate School and Administrative Co-Chair of UHSCR, [human.subjects@emich.edu](mailto:human.subjects@emich.edu)).

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**PRINT NAMES:**

**Signatures**

Student Signature       Parent Signature

Date

Investigator or Specified Designee       Date
Eastern Michigan University
INFORMED CONSENT: Current or Past Students

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When the study is complete, you will receive an iTunes gift card for $10. Unfortunately, we are not able to compensate you for your participation, but we do value your input and information.

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I have read or had read to me all of the above information about this research study, including the research procedure, possible risks, side effects, and likelihood of benefit to me. The content and meaning of this information has been explained and I understand. All my questions, at this time, have been answered.

PRINT NAME:

Student Participant:

Parent:

Signatures:

Student Participant (your signature)                     Date

Parent (signature)                     Date

Investigator or Specified Designee                     Date
Appendix C: Focus Group Discussion Guides

Focus Group Guide – Students

Opening Questions

Introductory

Tell us who you are, what courses you are enrolled in, and what you enjoy doing most when you are not in school?

Transition Question

Now that we have all gone around and gotten to a chance to know each other a bit, let me throw out a question for you all to talk about …..

When I say the words dual enrollment, Career and Technical Education (CTE) and/or the Michigan Merit Curriculum (MMC) what experiences have you all had with these things? *Are you familiar with dual enrollment, CTE and/or the MMC?*

Key Questions

What has been your own personal story regarding CTE and/or dual enrollment in the last five years since the MMC has been implemented?

How did you end up in the CTE and/or dual enrollment courses that you are enrolled in?

Okay, We have talked about CTE, dual enrollment and the MMC – how do you all feel that these things have prepared you for college, a career, or life beyond high school?

Ending Questions

Let’s discuss CTE, dual enrollment and the MMC at the local level- I am interested in your feelings regarding compromises you have had to make and your awareness about the politics in Dearborn surrounding these things?

If you had a chance to give advice to the Dearborn Superintendent, the Principal of this high school, or the local school board members regarding dual enrollment, the MMC and/or CTE – what advice would you give?

Okay – as we begin to get to the end of these discussions ………

Of the topics discussed today, which one is most important to you (CTE, dual enrollment, the MMC or other things)?

In closing our discussion today ………..

Is there anything that we missed? Is there anything that you came wanting to say that you did not get a chance to say?

Closure- Unanticipated Questions, Summary
Explain if necessary and/or refer to the guide form MDE that will be included with the informed consent documents

Focus Group Guide – Parents

Opening Questions
Introductory
Tell us who you are, what courses your child is enrolled in, and what you enjoy doing most for recreation or for pleasure?

Transition Question

Now that we have all gone around and gotten to a chance to know each other a bit, let me throw out a question for you all to talk about …..

When I say the words dual enrollment, Career and Technical Education (CTE) and/or the Michigan Merit Curriculum (MMC) what experiences have you all had with these things? *[Are you familiar with dual enrollment, CTE and/or the MMC?]

Key Questions

What has been you or your child’s own personal story regarding CTE and/or dual enrollment in the last five years since the MMC has been implemented?

How did your child end up in the CTE and/or dual enrollment courses that they are enrolled in?

Okay, We have talked about CTE, dual enrollment and the MMC – how do you all feel that these things have prepared your child for college, a career, or life beyond high school?

Ending Questions

Let’s discuss CTE, dual enrollment and the MMC at the local level- I am interested in your feelings regarding compromises you or your child has had to make and your awareness about the politics in Dearborn surrounding these things?

If you had a chance to give advice to the Dearborn Superintendent, the Principal of this high school, or the local school board members regarding dual enrollment, the MMC, and/or CTE – what advice would you give?

Okay – as we begin to get to the end of these discussions ……..
Of the topics discussed today, which one is most important to you (CTE, dual enrollment, the MMC or other things)?
In closing our discussion today ………
Is there anything that we missed? Is there anything that you came wanting to say that you did not get a chance to say?
Closure - Unanticipated Questions, Summary
*Explain if necessary and/or refer to the guide form MDE that will be included with the informed consent documents
Focus Group Guide – Teachers

Opening Questions
Introductory
   Tell us who you are, what courses you teach, and what you enjoy doing most when you are not teaching or at work?

Transition Question

   Now that we have all gone around and gotten to a chance to know each other a bit, let me throw out a question for you all to talk about …..

   When I say the words dual enrollment, Career and Technical Education (CTE) and/or the Michigan Merit Curriculum (MMC) what experiences have you all had with these things? *[Are you familiar with dual enrollment, CTE and/or the MMC?]

Key Questions

   What has been you or your own personal story regarding CTE and/or dual enrollment in the last five years since the MMC has been implemented?

   How did your students end up in the CTE and/or dual enrollment courses that they are enrolled in?

   Okay, We have talked about CTE, dual enrollment and the MMC – how do you all feel that these things have prepared your students for college, a career, or life beyond high school?

Ending Questions

   Let’s discuss CTE, dual enrollment and the MMC at the local level- I am interested in your feelings regarding compromises you or your students have had to make and your awareness about the politics in Dearborn surrounding these things?

   If you had a chance to give advice to the Dearborn Superintendent, the Principal of this high school, or the local school board members regarding dual enrollment, the MMC, and/or CTE – what advice would you give?

   Okay – as we begin to get to the end of these discussions ……..
   Of the topics discussed today, which one is most important to you (CTE, dual enrollment, the MMC or other things)?

   In closing our discussion today ……….
   Is there anything that we missed? Is there anything that you came wanting to say that you did not get a chance to say?

Closure - Unanticipated Questions, Summary

*Explain if necessary and/or refer to the guide form MDE that will be included with the informed consent documents
Focus Group Guide – Administrators

Opening Questions
Introductory
Tell us who you are, what your administrative responsibilities are (grade level, etc.) and what you enjoy doing most when you are not at work?

Transition Question
Now that we have all gone around and gotten to a chance to know each other a bit, let me throw out a question for you all to talk about …..

When I say the words dual enrollment, Career and Technical Education (CTE) and/or the Michigan Merit Curriculum (MMC) what experiences have you all had with these things? *[Are you familiar with dual enrollment, CTE and/or the MMC?]

Key Questions
What has been your own personal story regarding CTE and/or dual enrollment in the last five years since the MMC has been implemented?

How did your students end up in the CTE and/or dual enrollment courses that they are enrolled in?

Okay, We have talked about CTE, dual enrollment and the MMC – how do you all feel that these things have prepared your students for college, a career, or life beyond high school?

Ending Questions
Let’s discuss CTE, dual enrollment and the MMC at the local level - I am interested in your feelings regarding compromises you or your students have had to make and your awareness about the politics in Dearborn surrounding these things?

If you had a chance to give advice to the Dearborn Superintendent, the Principal of this high school, or the local school board members regarding dual enrollment, the MMC, and/or CTE – what advice would you give?

Okay – as we begin to get to the end of these discussions ………

Of the topics discussed today, which one is most important to you (CTE, dual enrollment, the MMC or other things)?

In closing our discussion today ………..

Is there anything that we missed? Is there anything that you came wanting to say that you did not get a chance to say?

Closure – Unanticipated Questions, Summary
*Explain if necessary and/or refer to the guide form MDE that will be included with the informed consent documents
Appendix D: Michigan Merit Curriculum

**Michigan Merit High School Graduation Requirement Overview**

**Goal:** To ensure that Michigan's high school graduates have the necessary skills to succeed either in postsecondary education or in the workplace.

**Components:**

- Sixteen mandatory credits, which are aligned with recommended college- and work-ready curriculum:
  - Four credits in English language arts.
  - Four credits in math, including Geometry and Algebra I and II. At least one math course must be taken during the student's senior year.
  - Three credits in science, with use of labs, including biology and chemistry or physics.
  - Three credits in social sciences including U.S. History & Geography, World History & Geography, .5 Civics, .5 Economics.
  - One credit in Visual, Performing and Applied Arts.
  - One credit in Physical Education and Health.
  - All high school students must also participate in an online course or learning experience.
  - Effective for the class of 2016, the credit requirement will increase to 18 credits, to include two credits in world languages. Students may receive credit if they have had a similar learning experience in grades K-12.

- Awarding credit is based on proficiency in expectations, not seat time and can be earned prior to a student entering high school or by testing-out.

- Credit may be earned through one or more of the following: alternative course work, humanities course sequences, career and technical education, industrial technology courses, or vocational education.

- Credit can be earned through advanced studies such as accelerated course placement, advanced placement, dual enrollment, or international baccalaureate program or an early college/middle college program.

- Requirement that the department of education develops subject area content expectations and subject area assessments to evaluate whether students have met those expectations.

- Option for a student's parent to request a personal curriculum for the student which is developed with the high school counselor or other designee selected by the high school principal. The personal curriculum is for that small percentage of students who seek to exceed the requirements of the MMC or for students with disabilities who need special accommodation and modifications.

- Beginning with students entering 8th grade in 2006 (Class of 2011), schools must give 7th grade students the opportunity to create an educational development plan based on a career pathways program or similar career exploration program. All students must create a plan before entering high school.

- The superintendent of public instruction may designate up to 15 specialty high schools that are exempt from certain requirements of the Michigan Merit High School Graduation Requirements. These specialty schools are eligible for exemptions if the school:
  - Incorporates a significant reading and writing component throughout its curriculum.
  - Uses a specialized, innovative and rigorous curriculum in areas such as performing arts, world language, and extensive use of internships or other learning innovations.
  - Demonstrates the following: mean scores from ACT math and science exams that exceed by 10% the district average; an 85% graduation rate; and enrollment of 75% of graduates into a postsecondary institution.
Appendix E: Dual Enrollment

To: Local and Intermediate School Superintendents  
   High School Principals

From: Sally Vaughn, Ph.D.  
       Deputy Superintendent/Chief Academic Officer

Date: October 23, 2007

Subject: Addition of ACT Scores to Qualify for Dual Enrollment

In a previous memorandum, it was indicated that PLAN, PSAT, and the Michigan Merit Examination (MME) scores can be used to determine eligibility for dual enrollment. The ACT scores have also been added to the list of those that qualify students for dual enrollment. The complete list of scores that qualify students for dual enrollment are as follows:

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Test Section</th>
<th>Content Area</th>
<th>Minimum Dual Enrollment Qualifying Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSAT</td>
<td>Critical Reading</td>
<td>Reading</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>Writing Skills</td>
<td>Writing</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>Mathematics</td>
<td>Mathematics</td>
<td>45</td>
</tr>
<tr>
<td>PLAN</td>
<td>Mathematics</td>
<td>Mathematics</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Reading</td>
<td>Reading</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Science</td>
<td>Science</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>English</td>
<td>English</td>
<td>21</td>
</tr>
<tr>
<td>ACT</td>
<td>Mathematics</td>
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</tr>
<tr>
<td></td>
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<tr>
<td></td>
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<td>19</td>
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<tr>
<td></td>
<td>Social Studies</td>
<td>Social Studies</td>
<td>1100</td>
</tr>
</tbody>
</table>

In addition, several individuals have contacted the Office of Educational Assessment and Accountability (OEAA) with questions. OEAA has compiled the attached list of questions received thus far. As additional questions are received, these will be added to this list and the updated list will be posted at the MME website: michigan.gov/mme.

Please feel free to contact Sam Siercic at (517) 243-1162 or via e-mail at siersic@michigan.gov if you or your staff have any questions about the use of the PLAN, ACT, PSAT, or MME for dual enrollment.

cc: Assessment Coordinators
POSTSECONDARY ENROLLMENT OPTIONS ACT
Act 160 of 1996

AN ACT to establish a postsecondary enrollment options program for certain students enrolled in Michigan schools; to prescribe certain duties of public schools; to prescribe certain powers and duties of certain state departments, officials, and agencies; and to repeal acts and parts of acts.


The People of the State of Michigan enact:

388.511 Short title.
Sec. 1. This act shall be known and may be cited as the "postsecondary enrollment options act".

388.512 Purpose of act.
Sec. 2. The purpose of this act is to provide a wider variety of options to high school pupils by encouraging and enabling qualified pupils to enroll in courses or programs in eligible postsecondary institutions.

388.513 Definitions; rules; scope.
Sec. 3. (1) As used in this act:
(a) "Community college" means a community college established under the community college act of 1966, 1966 PA 331, MCL 388.1 to 388.195, or under part 25 of the revised school code, 1976 PA 451, MCL 380.1601 to 380.1607, or a federal tribally controlled community college located in this state that is recognized under the tribally controlled community college assistance act of 1978, 25 USC 1801 to 1852, and is determined by the department to meet the requirements for accreditation by a recognized regional accrediting body.

(b) "Department" means the department of education.

(c) "Eligible charges" means tuition and mandatory course fees, material fees, and registration fees required by an eligible institution for enrollment in an eligible course. Eligible charges also include any late fees charged by an eligible postsecondary institution due to the school district's failure to make a required payment according to the timetable prescribed under this act. Eligible charges do not include transportation or parking costs or activity fees.

(d) "Eligible course" means a course offered by an eligible postsecondary institution that is not offered by the school district in which the eligible student is enrolled, or that is offered by the school district but is determined by the board of the school district to not be available to the eligible student because of a scheduling conflict beyond the eligible student's control; that is an academic course not ordinarily taken as an activity course; that is a course that the postsecondary institution normally applies toward satisfaction of degree requirements; that is not a hobby craft or recreational course; and that is in a subject area other than physical education, theology, divinity, or religious education. However, until the 2006-2007 school year, for an eligible student who has not achieved state endorsement in all subject areas under section 1279 of the revised school code, 1976 PA 451, MCL 380.1279, an eligible course is limited to a course in a subject area for which he or she has achieved state endorsement, a course in computer science or foreign language not offered by the school district, or a course in fine arts as permitted by the school district. Beginning with eligibility to participate under this act during the 2006-2007 school year, for an eligible student who has not achieved a qualifying score in each subject area on a readiness assessment or the Michigan merit examination, as applicable for the student, an eligible course is limited to a course in a subject area for which he or she has achieved a qualifying score, a course in computer science or foreign language not offered by the school district, or a course in fine arts as permitted by the school district.

(c) "Eligible postsecondary institution" means a state university, community college, or independent nonprofit degree-granting college or university that is located in this state and that chooses to comply with this act.

(e) "Eligible student" means, except as otherwise provided in this subdivision, a student enrolled in at least 1 high school class at at least grade 11 in a school district in this state, except a foreign exchange pupil enrolled in a school district under a cultural exchange program. Until the 2006-2007 school year, to be an eligible student a student must have achieved state endorsement in all subject areas under section 1279 of the revised school code, 1976 PA 451, MCL 380.1279, and, subject to subsection (2), the student shall not have been enrolled in high school for more than 4 school years including the school year in which the student seeks
to enroll in an eligible course under this act. However, if the student has not achieved state endorsement in all subject areas under that section, the student is an eligible student only for the limited purpose of enrolling in 1 or more eligible courses under this act in a subject area for which he or she has achieved state endorsement in computer science or foreign language not offered by the school district, or in fine arts as permitted by the school district. Beginning with eligibility to participate under this act during the 2006-2007 school year, to be an eligible student a student who has not taken the Michigan merit examination must have achieved a qualifying score in all subject areas on a readiness assessment and a student who has taken the Michigan merit examination must have achieved a qualifying score in all subject areas on the Michigan merit examination, and, subject to subsection (2), the student shall not have been enrolled in high school for more than 4 school years including the school year in which the student seeks to enroll in an eligible course under this act. However, if the student has not achieved a qualifying score in all subject areas on a readiness assessment or the Michigan merit examination, as applicable for the student, the student is an eligible student only for the limited purpose of enrolling in 1 or more eligible courses under this act in a subject area for which he or she has achieved a qualifying score, in computer science or foreign language not offered by the school district, or in fine arts as permitted by the school district. For the purposes of determining the number of years a pupil has been enrolled in high school, a pupil who is enrolled in high school for less than 90 days of a school year due to illness or other circumstances beyond the control of the pupil or the pupil’s parent or guardian is not considered to be enrolled in high school for that school year.

(2) "Intermediate school district" means that term as defined in section 4 of the revised school code, 1976 PA 451, MCL 380.4.

(3) "Michigan merit examination" means that examination developed under section 1279g of the revised school code, 1976 PA 451, MCL 380.1279g.

(4) "Qualifying score" means a score on a readiness assessment or the Michigan merit examination that has been determined by the superintendent of public instruction to indicate readiness to enroll in a postsecondary course in that subject area under this act.

(5) "Readiness assessment" means assessment instruments that are aligned with state learning standards; that are used nationally to provide high school students with an early indication of college readiness proficiency in English, mathematics, reading, social studies, and science and may contain a comprehensive career planning program; and that are approved by the superintendent of public instruction for the purposes of this act.

(6) "School district" means that term as defined in section 6 of the revised school code, 1976 PA 451, MCL 380.6, a local school district as defined in section 5 of the revised school code, 1976 PA 451, MCL 380.5, or a public school academy as defined in section 5 of the revised school code, 1976 PA 451, MCL 380.5.

(7) "State university" means a state institution of higher education described in section 4, 5, or 6 of article VIII of the state constitution of 1963.

(8) The superintendent of public instruction shall promulgate rules establishing criteria and procedures under which a student who has been enrolled in high school for more than 4 years but not more than 3 years may be considered to be an eligible student. The rules shall address special circumstances under which a student may qualify to be considered an eligible student under this subsection and may limit the number of courses in which a student who qualifies under this subsection may enroll. For the purposes of determining the number of years a pupil has been enrolled in high school, a pupil who is enrolled in high school for less than 90 days of a school year due to illness or other circumstances beyond the control of the pupil or the pupil’s parent or guardian is not considered to be enrolled in high school for that school year.


388.513a Readiness assessment; duties of superintendent of public instruction.

Sec. 3a. (1) Not later than July 1, 2005, the superintendent of public instruction shall do both of the following:

(a) Approve 1 or more readiness assessments that may be used for the purposes of determining eligible students beginning with participation in the 2006-2007 school year. Readiness assessments shall be aligned with state learning standards and shall provide high school students with an early indication of proficiency in the subject areas of English, mathematics, reading, social studies, and science and contain a comprehensive career planning program.

(b) Determine qualifying scores for each subject area component of a readiness assessment that indicate readiness to enroll in a postsecondary course in that subject area under this act.

(2) Not later than July 1, 2006, the superintendent of public instruction shall determine qualifying scores...
for each subject area component of the Michigan merit examination that indicate readiness to enroll in a postsecondary course in that subject area under this act.

(3) Unless the school district in which the student is enrolled elects to pay these costs, a student who takes a readiness assessment for the purposes of this act is responsible for paying all costs for taking and obtaining qualifying scores on a readiness assessment for the purposes of this act. This state is not responsible for any of these costs.


388.514 Student eligibility; letter signed by student’s principal; application for enrollment; notice to be sent by postsecondary institution; bill detailing eligible charges; payment by school district; late fee; attendance verification; refund; availability of correspondence; books as school property; section inapplicable to certain courses; transportation and parking costs not required.

Sec. 4. (1) The school district in which an eligible student is enrolled shall provide to the eligible student a letter signed by the student’s principal indicating the student’s eligibility under this act.

(2) An eligible student may apply to an eligible postsecondary institution to enroll in 1 or more eligible courses offered by that eligible postsecondary institution and, if accepted, may enroll in 1 or more of those courses.

(3) Within a reasonable time after registration, the eligible postsecondary institution shall send written notice to the eligible student and his or her school district. The notice shall indicate the course or courses and hours of enrollment of that eligible student. The eligible postsecondary institution shall notify the eligible student about tuition, fees, books, materials, and other related charges, as determined by the postsecondary institution, in the customary manner used by the eligible postsecondary institution, and shall notify the eligible student of the estimated amount of the eligible charges that will be billed to the school district under subsection (4).

(4) Unless otherwise agreed between the eligible postsecondary institution and the school district, after the expiration of the institution’s drop/add period for the course, an eligible postsecondary institution shall send a bill to the eligible student’s school district detailing the eligible charges for each eligible course in which the student is enrolled under this act.

(5) Upon receiving the bill under subsection (4), the school district shall cause to be paid to the eligible postsecondary institution on behalf of the eligible student an amount equal to the lesser of the amount of the eligible charges or the prorated percentage of the state portion of the foundation allowance paid on behalf of that particular eligible student under section 20 of the state school aid act of 1979, Act No. 94 of the Public Acts of 1979, being section 388.1620 of the Michigan Compiled Laws, with the proration based on the proportion of the school year that the eligible student attends the postsecondary institution. A school district may pay more money to an eligible postsecondary institution on behalf of an eligible student than is required under this act, and may use local school operating revenue for that purpose. The eligible student is responsible for payment of the remainder of the costs associated with his or her postsecondary enrollment that exceed the amount the school district is required to pay under this act and that are not paid by the school district. As used in this subsection, “local school operating revenue" means that term as defined in section 20 of Act No. 94 of the Public Acts of 1979.

(6) An eligible postsecondary institution shall not charge a late fee to an eligible student or a school district for a payment that is made in compliance with the timetable prescribed under this act even if the payment would otherwise be considered late by the postsecondary institution.

(7) A school district may require an eligible student to provide, on a form supplied by the school district, reasonable verification that the eligible student is regularly attending a postsecondary course.

(8) If an eligible student enrolled in an eligible course under this act does not complete the course, and if the school district has paid money for the course on behalf of the student, the postsecondary institution shall forward to the school district any funds that are refundable due to noncompletion of the course. The school district shall then forward to the student any refunded money in excess of the amount paid by the school district for the course on behalf of the student.

(9) A school district shall make available to an eligible student enrolled in the school district copies of all correspondence in the possession of the school district regarding the eligible student’s participation in postsecondary enrollment under this act. Correspondence described in this subsection shall be kept by the school district for at least 1 year.

(10) If a school district pays for books for an eligible student for a postsecondary course under this section, the books are the property of the school district and shall be turned over to the school district after the eligible student completes the course.
(1) This section does not apply to any postsecondary courses in which an eligible student is enrolled in addition to being enrolled full-time in that eligible student’s school district; to a postsecondary course an eligible student is retaking after failing to achieve a satisfactory grade; or to a course contrary to the eligibility provisions of this act. In determining full-time enrollment in a school district under this act or full-time required membership under Act No. 94 of the Public Acts of 1979, being sections 388.1601 to 388.1772 of the Michigan Compiled Laws, for pupils enrolled in a postsecondary institution under this act, the pupil’s enrollment in both the school district and the postsecondary institution shall be counted as enrollment in the school district and a pupil shall not be considered to be enrolled in a school district less than full-time solely because of the effect of the pupil’s postsecondary enrollment, including necessary travel time, on the number of class hours provided by the school district to the pupil.

(2) This act does not require a school district to pay or otherwise provide financial support for transportation or parking costs necessary for an eligible student to participate in postsecondary enrollment under this act. A school district is not liable for any injury incurred by an eligible student that is related to transportation necessary for the eligible student to participate in postsecondary enrollment under this act.


388.515 Participation in intercollegiate athletics prohibited.

Sec. 5. An eligible student enrolled in a postsecondary institution under this act shall not participate in intercollegiate athletics at the postsecondary institution while he or she is enrolled under this act. An eligible student who violates this subsection forfeits his or her eligibility under this act.


388.516 Priority of students.

Sec. 6. An eligible postsecondary institution may give priority to its postsecondary students when enrolling eligible students in postsecondary courses under this act for high school credit only. Once an eligible student has been enrolled in a postsecondary course under this act, the postsecondary institution shall not displace the eligible student with another student.


388.517 Academic credit.

Sec. 7. (1) An eligible student may enroll in, and receive payment by the school district under section 4(5) of all or part of eligible charges for, an eligible course under this act for high school credit or postsecondary credit, or both. At the time an eligible student enrolls in a postsecondary course under this act, he or she shall designate whether the course is for high school or postsecondary credit, or both, and shall notify both his or her high school and the postsecondary institution of that designation. An eligible student taking more than 1 postsecondary course under this act may make different credit designations under this subsection for different courses. An eligible student shall not audit a postsecondary course in which he or she is enrolled under this act.

(2) A school district shall grant academic credit to an eligible student enrolled in an eligible course for high school credit under this act if he or she successfully completes the course, as determined by the eligible postsecondary institution. The amount of high school credit granted by a school district for a postsecondary course completed under this act shall be determined by the school district.

The high school credits granted to an eligible student under this act shall be counted toward the graduation requirements and subject area requirements of the school district. Evidence of successful completion of each course and high school credits granted shall be included in the eligible student’s high school record. Subject to section 438 of subpart 2 of part C of the general education provisions act, title IV of Public Law 90-247, 20 U.S.C. 1232g, commonly referred to as the family educational rights and privacy act of 1974, an eligible postsecondary institution shall provide the school district with a copy of the eligible student’s grade in each course taken for high school credit under this act. Upon the request of an eligible student, his or her high school record and transcript shall also include evidence of successful completion and postsecondary credits granted for a course taken for postsecondary credit under this act. In either case, the eligible student’s high school record and transcript shall indicate that the credits were earned at an eligible postsecondary institution and identify the postsecondary institution.

(4) If a student enrolls in an eligible postsecondary institution after leaving high school, the eligible postsecondary institution, in accordance with institutional policy, shall award postsecondary credit for postsecondary courses successfully completed by that student for high school credit under this act at that eligible postsecondary institution. An eligible postsecondary institution shall not charge a student for credit awarded under this subsection.
388.510 Enrollment without tuition or fee support.

Sec. 8. This act does not restrict the ability of an eligible student or any other pupil to enroll in any postsecondary institution without tuition and fee support under this act.


388.519 Information and counseling services.

Sec. 9. (1) Each school district shall provide information to all high school students on the postsecondary enrollment options under this act, including enrollment eligibility; the institutions and types of courses that are eligible for participation; the decision making process for granting academic credits; an explanation of eligible charges that will be paid by the school district and of financial arrangements for eligible charges and for paying costs not paid for by the school district; eligibility for payment of all or part of eligible charges by the school district under this act; an explanation that, if the student qualifies for payment of all or part of eligible charges by the school district under this act, the school district will pay that support directly to the postsecondary institution upon being billed by the postsecondary institution; and that the student is not responsible for that payment but is responsible for payment of costs not paid for under this act; available support services; the need to arrange an appropriate schedule; consequences of failing or not completing a postsecondary course in which the eligible student enrolls; the effect of enrolling in a postsecondary course on the eligible student's ability to complete the required high school graduation requirements; and the academic and social responsibilities that must be assumed by the eligible student and his or her parent or guardian.

(2) To the extent possible, a school district shall provide counseling services to an eligible student and his or her parent or guardian before the eligible student enrolls in postsecondary courses under this act to ensure that the eligible student and his or her parent or guardian are fully aware of the benefits, risks, and possible consequences of enrolling in a postsecondary course. The person providing the counseling shall encourage the eligible student and his or her parent or guardian to also use available counseling services at the eligible postsecondary institution before enrolling in a postsecondary course to ensure that anticipated plans are appropriate. A school district may provide the counseling required under this section in a group meeting if additional personalized counseling is also made available.

(3) Before enrolling in an eligible course at an eligible postsecondary institution under this act, an eligible student and his or her parent or guardian shall file with the eligible postsecondary institution a signed form provided by the eligible student's school district stating that the student is an eligible student and has received the information and counseling specified in subsections (1) and (2) and that the student understands the responsibilities that must be assumed in enrolling in the course. Upon request, the department shall provide technical assistance to a school district and to an eligible postsecondary institution in developing appropriate forms and counseling guidelines for purposes of this section.


388.520 General information.

Sec. 10. By May 1, 1996, and by March 1 of each succeeding year, a school district shall provide general information about the postsecondary enrollment options under this act to all pupils in grade 8 or higher.


388.521 Annual comprehensive financial report; summary annual report.

Sec. 11. (1) Each intermediate school district annually shall collect from each of its constituent school districts and provide to the department at the same time that it submits the annual comprehensive financial report required under section 18 of the state school aid act of 1979, Act No. 94 of the Public Acts of 1979, being section 388.1618 of the Michigan Compiled Laws, information for the immediately preceding school year on all of the following:

(a) The amount of money expended by the school district for payments required under this act.

(b) The number of eligible students who were enrolled in the school district and the number of those eligible students who enrolled in 1 or more postsecondary courses and received payment of all or part of eligible charges under this act, both in the aggregate and by grade level.

(c) The percentage of the school district's enrollment represented by the eligible students described in subdivision (b), both in the aggregate and by grade level.

(d) The total number of postsecondary courses for which the school district made payment under this act, the number of those courses for which postsecondary credit was granted, the number of those courses for which high school credit was granted, and the number of those courses that were not completed by the eligible student.
(2) Not later than March 1 of each year, the department shall prepare and submit to the house and senate fiscal agencies and the department of management and budget a summary annual report on the information received under subdivision (1).


388.522 Rules.

Sec. 12. (1) The department may promulgate rules it considers necessary to implement this act. Rules shall be promulgated under the administrative procedures act of 1969, Act No. 306 of the Public Acts of 1969, being sections 24.201 to 24.328 of the Michigan Compiled Laws.

(2) If the Michigan supreme court rules that sections 45 and 46 of the administrative procedures act of 1969, Act No. 306 of the Public Acts of 1969, being sections 24.245 and 24.246 of the Michigan Compiled Laws, are unconstitutional and a statute requiring legislative review of administrative rules is not enacted within 90 days after the Michigan supreme court ruling, the department may not promulgate rules under this section.


Compiler's note: In separate opinions, the Michigan Supreme Court held that Section 45(8), (9), (10), and (12) and the second sentence of Section 46(1) ("An agency shall not file a rule ... until at least 30 days after the date of the certificate of approval by the committee or after the legislature adopts a concurrent resolution approving the rule.") of the Administrative Procedures Act of 1969, in providing for the Legislature's reservation of authority to approve or disapprove rules promulgated by executive branch agencies, did not comply with the enactment and presentment requirements of Const 1963, Art 4, and violated the separation of powers provision of Const 1963, Art 5, and, therefore, were unconstitutional. These specified portions were declared to be severable with the remaining portions remaining effective. Bluhm v Department of Corrections, 401 Mich 103 (2006).


Compiler's note: The repealed section pertained to effective date and repeal of act.

388.524 Conditional effective date.

Sec. 14. This act shall not take effect unless all of the following bills of the 88th Legislature are enacted into law:

(a) House Bill No. 4640.
(b) House Bill No. 4642.


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Appendix G: Dual Enrollment Classes at the Southeastern Michigan high school

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