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## ABSTRACT

Western Michigan University (WMU) in Kalamazoo, Michigan, has partnered with Michigan community colleges to develop an occupational education studies (OES) program to prepare future career and technical education (CTE) instructors by allowing students to transfer their technical degree from the community college as their teaching major at the university. The OES program began with six community college partners in fall, 1999, and added eight additional community colleges by 2001. Students with specific technical degrees in vocational program areas can transfer their technical degrees to WMU and obtain their vocational teacher certification and a bachelor's degree. The number of OES program participants increased from 3 in fall, 2000, to more than 40 in fall, 2002. The OES program's diverse marketing efforts, which include a World Wide Web site, brochures, posters, information about the program in partner schools' publications, and inservice activities for counselors and instructors, have proved key to its success. The OES program's policies are set by an external advisory board that includes more than 30 members and a 4-member internal advisory board. Transition counselors at WMU and its partner community colleges also play a major role in reaching new students. Further research is needed to identify factors motivating students to enroll in the OES program and to determine its effectiveness. (Contains 13 references.) (MN)

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Sustaining innovation in career and technical education

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## Statement of Need

Research shows that between 1996 and 2006 schools will need to hire two million new teachers due to retirement (Ritz, 1999). In addition to the retirement wave, there will be an increase in school age students from 54 million to 57 million (US Department of Education, 1995) and an increase in technology requirements across the country. It is easy to see that there is a critical shortage of teachers in more and more districts and states across the country.

Additionally, the National Bureau of Labor Statistics (NBS, 1998) reported that there were 419,625 technical education teachers in the U.S. The Bureau projects that in the next five years 50,000 additional technical education teachers will be needed on top of the replacement need for 188,831 technical teachers. More recent data from CareerInfoNet (2002) shows that nationally there will be a 13 percent increase in the need for career and technical educations in the classroom. Boreen and Niday, as cited in Szumanski, 2003 report that new teachers are leaving the profession at rates as high as 50% in the first five years and 80% within 10 years. At the same time, fewer students are identifying career and technical education as their career choice. "The proportion of new entrants...declined..between 1988 and 1991 (Guarino, Brewer, and Hove 2000, p. 8)."

In a report by Guarino, Brewer, and Hove completed for the National Center for Research in Vocational Education (NCRVE)(2000) the number of new CTE teachers that will be needed in the next decade is overwhelming. Additionally, the academic requirements for new teachers will increase as well. Future CTE teachers are going to need stronger backgrounds in mathematics, science, and technology. According to Cutshall, (as cited in Szuminski, 2003), "Teaching in CTE is a rigorous and frequently

underrated challenge.” This challenge is due in part to the decline in programs, the isolation of CTE teachers, and the need for increased technology, math, and science in CTE programs.

Because of the teacher shortage, Gray and Walter (as cited in Szumanski, 2001) report that alternative teacher education methods will likely become “more prevalent if not the dominant” route in the next century. Community colleges are increasingly viewed as a one possible solution to the critical shortage of teachers. According to a recent National Science Foundation (NSF) study, “Investing in Tomorrow’s Teachers: The Integral Role of Two-Year Colleges in the Science and Mathematics Preparation of Prospective Teachers”

It has become increasingly apparent that the resources of the nation’s community colleges must be utilized fully if the need for a teaching force well prepared...is to be met. Generally, neither two-year colleges, nor the four-year institutions where teachers complete their preparation, or the schools that hire teachers fully recognize the essential role of two-year colleges in teacher preparation. In many ways, the preparation of teachers is a hidden mission of two-year colleges (Bragg, 1998).

Boggs and Bragg report “Community colleges are recruiting increasing numbers of new teachers, providing them with stronger mathematics and scientific preparation, and utilizing college resources to meet the challenges facing...secondary educators (1999, p. 1).” Luther Williams, Assistant Director for the National Science Foundation (NSF), as reported by Boggs and Bragg, states that “The resources of the nation’s community colleges must be fully utilized if the need for a teaching force well prepared in mathematics, engineering, and technology is to be met (1999, p. 3).”

Faced with the projected shortage of teachers, at least 20 states are working with community colleges to help train elementary and secondary school teachers. In an article

appearing in Community College Week (2001) approximately 2.7 million teaching positions will need to be filled in the next decade.

There are several factors that contribute to the unique role community colleges can play in the development of career and technical education (CTE) teachers. First, over one-half of all post-secondary students start their education at a community college (n.a., 2002). Over 10 million students take credit courses at community colleges located in all 50 states. Recruiting New Teachers, Inc. (1997) found that 3.5% of all incoming community college freshmen were interested in secondary education. This is equivalent to 500,000 teachers that represent approximately 20% of the teachers that will need to be replaced in the next decade.

Secondly, community colleges serve a more diverse population of students. According to the U.S. Department of Education (1995) 42 percent of all African American students and 55 percent of all Hispanic students are enrolled at community colleges. Currently, 30 percent of the secondary students in the U.S. are minorities. Only 15 percent of secondary teachers are minorities. There is a need for additional minority teachers in secondary education.

The severe shortages of CTE teachers can possibly be reduced through partnerships between community colleges and universities. These partnerships can make an education degree accessible for minorities, older adults returning to school, and others who cannot afford a four-year degree from a university.

### **One Response to the Need**

Western Michigan University (WMU), located in Kalamazoo, MI, has partnered with Michigan community colleges to develop an Occupational Education Studies

program (OES) to prepare future CTE instructors by allowing students to transfer their technical degree from the community college as their teaching major at the university. WMU has an enrollment of 28,931 students and has been training CTE teachers since 1910. WMU currently offers Undergraduate degrees in CTE, a Master's degree, and a Doctoral (Ed.D.) in Educational Leadership with an emphasis in Career and Technical Education. A Leadership Development Program (LDP) was added in 2001 to assist in preparing CTE future administrators.

WMU began the OES program in the fall of 1999 with six community college partners. The six partners were Glen Oaks Community College, Grand Rapids Community College, Kalamazoo Valley Community College, Kellogg Community College, Lansing Community College, and Muskegon Community College. By 2001 eight additional community colleges had partnered with WMU. These additional schools were Alpena Community College, Bay de Noc Community College, Jackson Community College, Lake Michigan Community College, Mid Michigan Community College, Montcalm Community College, Northwestern Michigan College, and Southwestern Michigan College.

Students with specific technical degrees in programs, such as, Auto Mechanics, Drafting, Business Education, Heating and Air Conditioning, and Welding can transfer their technical degree credits to WMU and obtain their vocational teacher certification and obtain a bachelor's degree. Programs of Work were developed at each community college for each of the articulated degrees. In the fall of 2000, three students had started at WMU through the OES program. In the fall of 2001, six additional students had

transferred and in the fall of 2002 over 40 students were enrolled at WMU in the OES program.

### **Marketing of the Program**

The marketing of the program has proven critical to its success. In addition to the website, brochures, and posters have been developed, partnered schools have added the information to their course guides and catalogs, and counselors and instructors have been in-serviced on the program. A website was developed at WMU, and an advisory committee was established and marketing materials were developed and distributed to partnered community colleges. Links to the partnered community colleges can be found at WMU's website and the community colleges are beginning to add links from their websites back to WMU's OES website.

Anecdotal evidence shows that students have learned about the OES program in a variety of ways. The counselor and instructor are the key individuals at the community college for sharing information about the program. Additionally, students have read about the program in college catalogs, through the brochures and posters, and at WMU's website.

### **Necessary Communication Strategies for the Program**

Communication and marketing are the keys to the continued success of the program. An external advisory board consisting of community college deans and transfer counselors, secondary CTE administrators, WMU transfer counselor, CTE instructors, the dean of the department, and Distance Education personnel meet twice a year to discuss issues and create policies for the program. Currently over 30 people serve on the advisory board. An internal advisory board is also important. The current internal

advisory board consists of a transfer counselor, two individuals from Distance Education and a CTE professor.

Transition counselors at WMU and at the community colleges play a major role in the communication process. The input of counselors on how to reach students has proven invaluable as the program continued to grow.

The Programs of Work must be updated yearly if they are to remain current. Course titles, numbers, and descriptions change frequently at many community colleges. In order to keep the information current, schools send changes, the programs of work are updated and then distributed to counselors at WMU and the community college, the Dean of Occupational Education at the community colleges, transition counselors at the community college, along with transfer counselor at WMU, distance education personnel, CTE instructors, and the webmaster for the OES program at WMU.

### **Recommendations for the Future**

Further research on the OES program needs to be conducted. The research needs to determine what motivates students to enroll in the OES program, collect data on the success of the programs, determine the efficiency of the system, establish a longitudinal study of graduates and determine the most effective recruitment tools. This research will be conducted during the spring and summer of 2003 with results published in 2004. For additional information about the OES program, visit the website at [www.wmich.edu/fcs/cte](http://www.wmich.edu/fcs/cte).



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III. **Professional Education Courses (21 credits) taken at WMU will include:**

ED 305	Secondary Content Literacy (Reading)	3 credits
CTE 305	Employability Skills for CTE	3 credits
CTE 348	Student Assessment & Management (includes 60 hours Pre-Internship)	3 credits
CTE 510	Special Populations in Career & Technical Education	3 credits
CTE 512	Principles of Career and Technical Education	3 credits
CTE 513	Teaching Methods for Career & Technical Education	3 credits
CTE 542	Curriculum Development in Career & Technical Education	3 credits

IV. **Directed Internship (12 credits)**

CTE 410	Seminar in Education	2 credits
CTE 475	Directed Field Experience (Intern Teaching)	10 credits

V. University Requirements include a Computer Literacy Course. **CIS 160 (KCC)** will satisfy that requirement.

VI. To complete the freshman/sophomore WMU general education requirements, transfer students from Kellogg Community College must present transcripts that indicate "MACRAO Agreement Satisfied" or have complete 29-31 hours as listed on the General Education Program Transfer Guide for KCC. An updated guide may be found at [www.wmich.edu/admi/micc/](http://www.wmich.edu/admi/micc/).

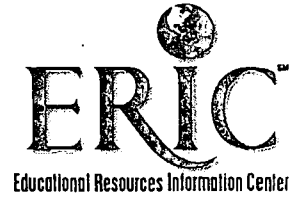
VII. General Education Graduation Requirements include the following areas, 6 credit hours in 2 of the 8 Distribution areas must be completed at WMU with courses at 300 level or above.

<b>Proficiencies</b>	
<b>Proficiency 1: College Level Writing</b> Satisfied by taking a KCC course that is listed in the WMU Transfer Guide for this area*	<b>Proficiency 3: College Level Math</b> Satisfied by taking a KCC course that is listed in the WMU Transfer Guide for this area*
<b>Proficiency 2: Baccalaureate Level Writing</b> Satisfied by CTE 542 (WMU)	<b>Proficiency 4: Enhance or Develop a Proficiency (Writing, Math, Critical Thinking, Oral Communication)</b> Satisfied by taking a KCC course that is listed in the WMU Transfer Guide for this area*
<b>Distribution Areas</b>	
<b>Area I Fine Arts</b> Satisfied by taking a KCC course that is listed in the WMU Transfer Guide for this area* <b>Minimum 3 semester hour credits</b>	<b>Area V Social &amp; Behavioral Science</b> Satisfied by taking a KCC course that is listed in the WMU Transfer Guide for this area* <b>Minimum 3 semester hour credits</b>
<b>Area II Humanities</b> Satisfied by taking a KCC course that is listed in the WMU Transfer Guide for this area* <b>Minimum 3 semester hour credits</b>	<b>Area VI Natural Science</b> Satisfied by taking a KCC course that is listed in the WMU Transfer Guide for this area* <b>Minimum 4-5 semester hour credits</b>
<b>Area III United States Culture &amp; Issues</b> Satisfied by taking a KCC course that is listed in the WMU Transfer Guide for this area* <b>Minimum 3 semester hour credits</b>	<b>Area VII Natural Science &amp; Technology Applications &amp; Implications</b> Satisfied by taking a KCC course that is listed in the WMU Transfer Guide for this area* <b>Minimum 3 semester hour credits</b>
<b>Area IV Other Cultures &amp; Civilizations</b> Satisfied by taking a KCC course that is listed in the WMU Transfer Guide for this area* <b>Minimum 3 semester hour credits</b>	<b>Area VIII Health &amp; Well Being</b> Satisfied by taking a KCC course that is listed in the WMU Transfer Guide for this area* <b>Minimum 2-3 semester hour credits</b>

\* NOTE: Consult your KCC counseling staff to make sure that you take the proper courses to complete your Occupational Education Studies Degree Transfer Program.



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