

**REVIEWER'S SUMMARY REPORT
ITEA - CTTE - NCATE**

Compliance with Specialty Guidelines

Initial Review

Institution Submitting Program: **Eastern Michigan University**

Program: Technology Education Date of Review: January 2003

Program Degree Level: Bachelor's – Initial Undergraduate

Reviewer: CTTE Review Team

Decision on Program:

Program Nationally Recognized

Program Recognized with Conditions

Decision Deferred. Additional Information Required to Complete Review.

Not Recognized

I. Perceived Program Strengths

The program's strengths include a well-qualified faculty and a clear awareness of contemporary directions in technology education. Course syllabi are well-developed, with appropriate goals, objectives, and activities. Department has begun to update activities and resources to reflect the new national standards.

II. Perceived Program Areas for Improvement

The program at Eastern Michigan is solid in most respects. While program has started to reflect new national standards, there is a need to emphasize the national standards in all course syllabi. Program should have more requirements in math and science. At a number of points throughout this review, this review team had the sense that the deficiencies may have had more to do with how the folio was prepared rather than with what may actually be occurring throughout the program.

III. Guidelines/Standards "Not Met":

None

IV. Review Team's Recommendations Regarding Guidelines "Met With Conditions":

Overview and Scope

- 3 Additional information is needed about the type of supervision provided. Additional information about how the student teaching process is organized and facilitated should also be provided.
- 4 There is insufficient information provided to assess the program's structure, including who is responsible for the delivery of technical courses and the relationship between technology education and career and technical education (vocational education). This relationship needs to be clarified since students from both programs are, in some cases, taking the same course.
- 7 Information should be provided for each of last three years. Specify majors in each curriculum tract.
- 8 Insufficient information is provided. In addition to the general source of funding, this section should provide information about the level, type, and adequacy of financial support.

Matrix

- 2.0 Specific courses required in the general education program should be listed. The evidence provided of the inclusion of mathematics and science concepts is insufficient.
- 3.2.1 Need to incorporate more current communication technologies (e.g., digital video, desktop publishing, etc.)
- 3.8 This section refers to the ability to design and develop activities for student use. Evidence needs to be provided to indicate how and where students are being taught how to do this in the program
- 4.2 Additional focus should be placed on preparing students to conduct solid strategic program planning and evaluation activities. As reported, the current planning emphasis appears to be focused more at the unit and course levels.
- 4.5 Given the importance of this area, it appears that additional emphasis could appropriately be given to such items as simulation, distance education, computer modeling, PowerPoint development, the use of modules, etc. (particularly in TEDU 460).
- 4.9 The evidence provided consists primarily of a discussion of student associations rather than activities designed to prepare teachers to establish, organize and manage these organizations. Additional emphasis should be given to this area.
- 4.10 Given the critical importance of preparing students to interpret and market

their programs to principals, superintendents, school boards, parents and other constituencies, additional emphasis should be given to this criterion.

- 4.11 The evidence provided does not describe how students will be taught to develop and coordinate external advisory committees.

In Summary

In summary, additional emphasis is recommended in strategic and program planning, teaching technological systems, establishing student organizations, working with advisory committees, program marketing, strategic planning and program evaluation, and the use of contemporary and cutting edge instructional technologies. Overall, there is some concern that much of the burden of preparing students to teach contemporary technology education is vested in methods and pre-method courses and student teaching. Part of the problem could be with the way evidence was presented in the program report.

V. Other Comments:

This is a good program report. The review team would suggest examining the vocational education component and its possible removal from the technology education program. This program appears to be a solid program that prepares good technology education teachers.

**REVIEWER ASSESSMENT INSTRUMENT
ITEA - CTTE - NCATE
CURRICULUM GUIDELINES
Initial Program in Technology Education**

Initial Review

Institution Being Evaluated: **Eastern Michigan University**

Degree Level: Bachelor's - Initial Undergraduate

Reviewer: CTTE Review Team

Date of Evaluation: January 2003

I. OVERVIEW AND SCOPE

The overview and scope of the program are presented in clear and concise narrative and graphical form as required. This section contains the following items 1 - 10.

Guideline Category	Evidence Submitted by Program	Evaluation and Recommendations
1. Mission, goals and objectives of program.	Identified in mission, goals, and objectives section	Met May want to refer to vocational education as "career and technical education".
2. Students' courses of all studies with all required courses clearly marked, including exact course and sequence taken by semester.	Identified in course of study section of the overview	Met
3. Descriptions of field experiences, student teaching, and internships (Must be in technology education program). Include the amount of time and the type of supervision.	Description of field experiences.	Met with Conditions Additional information is needed about the type of supervision provided. Additional information about how the student teaching process is organized and facilitated should also be provided.
4. Explanation of how the program may deviate from the guidelines.	Explanation in overview and scope section.	Met The lack of a bio-related technology component does not

		represent a deviation, since this was not required in the existing guidelines.
5. Descriptions of where the program is located within the professional unit and its interrelationships with other programs in the unit and the university/college.	Information contained in overview section.	Met with Conditions There is insufficient information provided to assess the program's structure, including who is responsible for the delivery of technical courses and the relationship between technology education and career and technical education (vocational education). This relationship needs to be clarified since students from both programs are, in some cases, taking the same course.
6. List of faculty with primary assignments in the technology education program. Provide rank, responsibilities, and a tenure status (Don't send vitae.)	Information provided in folio overview section.	Met
7. Number of graduates from the basic program over the past three years.	Some information provided in overview.	Met with Conditions Information should be provided for each of the last three years. Specify majors in each curriculum tract.
8. Description of program funding	Some information provided in overview.	Met with Conditions Insufficient information is provided. In addition to the general source of funding, this section should provide information about the level, type, and adequacy of financial support.
9. Description of program facilities	Information provided in folio overview section.	Met
10. The state certification/licensure requirements for technology education.	Information provided in folio overview section.	Met

II. MATRIX

There are five sections to the Matrix. The form shown below is designed to provide guidance for those teams that are reviewing folios. This section contains the following items: 1.0 - 5.4. See the document entitled "*The Preparation of Curriculum Folios in Technology Education*" for examples of the type of evidence that needs to be submitted.

THE CANDIDATE DEMONSTRATES THE ABILITY TO:

1.0 Develop a philosophy informed by current research findings in technology education, curriculum and instructional design, assessment, and professional development.

Guideline Category	Evidence Submitted by Program	Evaluation and Recommendations
1.1 Design programs based on a sound mission statement with stated goals and objectives that reflect the definition and intent of technology education.	Appropriate as described in standards and matrix sheet.	Met
1.2 Use an organized set of concepts, processes, and systems that are technological when designing course outlines, instructional strategies, and evaluation of student work.	Appropriate as described in standards and matrix sheet.	Met

THE CANDIDATE DEMONSTRATES THE ABILITY TO:

2.0 Possess the necessary depth and breadth in mathematics, science, and related disciplines to be able to successfully teach technology education.

Guideline Category	Evidence Submitted by Program	Evaluation and Recommendations
2.0 Possess the necessary depth and breadth in mathematics, science, and related disciplines to be able to successfully teach technology education.	Standards and matrix sheet.	Met with Conditions Specific courses required in the general education program should be listed. The evidence provided of the inclusion of mathematics and science concepts is insufficient.

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THE CANDIDATE DEMONSTRATES THE ABILITY TO:

3.0 Master teaching and technical skills appropriate to successfully teach the study of technology.

Guideline Category	Evidence Submitted by Program	Evaluation and Recommendations
3.1 Possess knowledge about the development of technology; its effects on people, the environment and culture; and industry, its organization, personnel systems, techniques, resources, and their impact on society and culture.	Appropriate as described	Met
3.2. Apply instructional content from the following content organizers:		
3.2.1 Communication: efficient use of resources to transfer information to extend human potential.	Appropriate as described	Met with Conditions Need to incorporate more current communication technologies (e.g., digital video, desktop publishing, etc.)
3.2.2 Construction: efficient use of resources to build structures or construct on site structures.	Appropriate as described	Met
3.2.3 Manufacturing: efficient use of resources to extract and convert raw/recycled materials to industrial and consumer goods.	Appropriate as described	Met
3.2.4 Transportation: efficient use of resources to attain and maintain direct physical contact and exchange among	Appropriate as described	Met Unclear of what text is used in this course.

individuals and units through the movement of materials, goods, and people.		
3.3 Identify and incorporate safe and efficient use of contemporary technological tools, instruments, and machines into a program of study.	Appropriate as described	Met
3.4 Incorporate insight, knowledge, and applications of technological concepts, processes, and systems into a teaching program.	Appropriate as described	Met
3.5 Use skills, creative abilities, positive self-concepts, and individual potentials in teaching technology.	Appropriate as described	Met Are other strategies and teaching methods used, such as cooperative learning?
3.6 Apply problem-solving and creative abilities involving human and material resources, processes, and technological systems.	Appropriate as described TEDU 450 seems to also meet this guideline.	Met
3.7 Use activity-oriented laboratory instruction, which reinforces abstract concepts through concrete experiences.	Appropriate as described	Met
3.8 Apply technology to the design and production of activities for student use.	TEDU 450 seems to also meet this standard .	Met with Conditions This section refers to the ability to design and develop activities for student use. Evidence needs to be provided to indicate how and where students are being taught how to do this in the program
3.9 Develop technology education programs that advance student attitudes,	.	Met Insufficient evidence is provided that students are

knowledge, and skills regarding how technological systems function.		being prepared to teach about technological systems.
3.10 Develop the ability of students to apply technological knowledge and skills, and to assess new or different past-present-future technology systems.	Little evidence is provided describing how students' are developing the ability to assess past, present, and future technologies. Additional evidence is needed.	Met

THE CANDIDATE DEMONSTRATES THE ABILITY TO:

4.0 Perform the following tasks in developing, managing, and evaluating a technology program in schools.

Guideline Category	Evidence Submitted by Program	Evaluation and Recommendations
4.1 Display a philosophy and knowledge of technology education.	Appropriate as described. TEDU 250 is a good course for this standard.	Met
4.2 Develop a strategic program plan that includes a mission statement, rationale for change, goals and objectives, action steps, as well as a program evaluation strategy.	Some components of TEDU 460 address strategic planning.	Met with Conditions Additional focus should be placed on preparing students to conduct comprehensive strategic program planning and evaluation activities. As reported, the current planning emphasis appears to be focused more at the unit and course levels.
4.3 Select content based on the goals and objectives appropriate to the content organizers (construction, manufacturing, communication, bio-related, transportation, or other organizers) of technology.	Appropriate as described	Met
4.4 Manage an educational environment in the classroom and laboratory to	Appropriate as described	Met

advance the instructional process.		
4.5 Select appropriate instructional technologies to effectively teach all student populations.		Met with conditions Given the importance of this area, it appears that additional emphasis could appropriately be given to such items as simulation, distance education, computer modeling, PowerPoint development, the use of modules, etc. (particularly in TEDU 460).
4.6 Provide for laboratory management (i.e., safety, inventory, filing, maintenance, requisitioning equipment and material, budgeting).	Appropriate as described	Met
4.7 Develop lesson plans, organize material, and select appropriate instructional strategies to teach in the psychomotor, affective, and cognitive domains of learning in technology.	Appropriate as described	Met
4.8 Establish clear expectations for student conduct, and develop and implement a behavior management policy program.	Appropriate as described	Met
4.9 Be able to establish a technology student association within the technology education program in a public school or in a university organization, including establishing a chapter, and assisting in management and evaluation.		Met with conditions The evidence provided consists primarily of a discussion of student associations rather than activities designed to prepare teachers to establish, organize and manage these organizations. Additional emphasis should be given to this area.
4.10 Promote and articulate technology education to		Met with conditions Given the critical

internal and external public audiences.		importance of preparing students to interpret and market their programs to principals, superintendents, school boards, parents and other constituencies, additional emphasis should be given to this criterion.
4.11 Be able to develop and coordinate an external advisory committee for a technology education program.	Some information but not much detail.	Met with Conditions The evidence provided does not describe how students demonstrate that they can develop and coordinate an external advisory committee.
4.12 Design a professional development plan for continued professional and personal growth.	Additional emphasis should be placed on this criterion.	Met
4.13 Use standards to evaluate and revise a technology education program. Identify standards for the program, establish a process for using the standards, and utilize findings for subsequent program revisions.	Appropriate as described.	Met

THE CANDIDATE DEMONSTRATES THE ABILITY TO:

- I. Develop attitudes, knowledge, and skills needed for success as a teacher in technology education.**

Guideline Category	Evidence Submitted by Program	Evaluation and Recommendations
5.1 Possess knowledge to organize classroom and laboratory experiences for the study of technology.	Appropriate as described	Met
5.2 Manage technological activities in both an individual and group	Appropriate as described	Met

setting.		
5.3 Apply multicultural and global perspectives as they relate to the study of technology.	Additional emphasis should be placed on this criterion.	Met
5.4 Apply values and ethics as they relate to content issues in the study of technology.		Met.