

Council on Technology Teacher Education (CTTE) Evolution, Goals, Organization, and Challenges

Technology teacher education has made a vital contribution to the technology education movement; however, it faces an uncertain future. This article addresses the evolution of the Council on Technology Teacher Education as a major voice for the field and explores several challenges that the association, in general, and individual teacher educators, in particular, are facing.

HISTORICAL NOTE

A need for a mechanism to represent and promote industrial arts teacher education was a major concern in the years following World War II. This concern led a group of industrial arts teacher educators to organize and participate in two program sessions at the American Industrial Arts Association (AIAA) conference held in May 1950. The first program, *An Organization for the Council*, was led by John A. Whitesel of Miami University in Ohio and featured presentations by Walter Williams, Jr., from the University of Florida, Carter V. Good from the University of Cincinnati, and DeWitt Hunt from Oklahoma A & M University. The second session, *A Program for the Council*, was also led by Whitesel and included presentations by Gordon O. Wilbur from the State Teachers College at Oswego, New York, Otto A. Hankammer from Kansas State Teachers College, and W. D. Stonner from Miami University (AIAA, 1950).

Out of this and other meetings came the first council of the American Industrial Arts Association, which was called the American Council on Industrial Arts Teacher Education (ACIATE). The new council immediately became active and started addressing major issues that faced industrial arts teacher education. At the 1951 AIAA conference, the issue of accreditation of industrial arts teacher education programs was the major topic of discussion for the council members. As a side bar, the organizing meeting for the American Council for Industrial Arts Supervisors (ACIAS) was held at that conference (AIAA, 1951).

In 1952, the council's program focused on graduate work for industrial arts teacher education. Also, at this meeting the first of a continuing series of yearbooks, *Inventory Analysis of Industrial Arts Teacher Education Facilities, Personnel and Programs*, was presented (AIAA, 1952). This publication started a long cooperative relationship with McKnight and McKnight (later Glencoe Publishing Com-

pany) in which the council prepared and edited the manuscript and McKnight Publishing Company produced and distributed the book.

Other early conferences dealt with a number of topics of concern for industrial arts teacher educators including *Selecting Industrial Arts Teachers* (AIAA, 1953), *Supervisory Practices in Industrial Teacher Education* (AIAA, 1954), and *Influences on Industrial Arts Teacher Education* (AIAA, 1955). At each of these conferences, the ACIATE had its annual conference preceding the AIAA conference and received nearly equal billing with the AIAA in the printed program. However, by 1957 the size of type used to showcase the AIAA on the conference program cover became larger than the type used to identify the ACIATE and ACIAS (AIAA, 1957). This change in the program layout did not reflect the level of activity of the council because the ACIATE conducted seven programs in 1957 while AIAA had 11. This number is comparable to the five ACIATE-sponsored programs and nine AIAA sessions conducted five years earlier (AIAA, 1952). The trend in program billing emphasis continued until 1963 when the councils' names disappeared from the program cover and appeared only on the inside cover. By 1977, there was no mention of the councils on either the outside or inside program covers (AIAA, 1977). These observations could be interpreted as a trend of the council moving from nearly an equal partner with AIAA in its formative years to becoming a less important affiliate later.

However, the council remained and continues to remain an important, supportive party of the larger association. It demonstrated this support when the ACIATE changed its name to the Council on Technology Teacher Education (CTTE) in 1986 at the request of the AIAA leadership soon after the parent association became the International Technology Education Association (ITEA).

COUNCIL GOALS

Membership of the CTTE is open to anyone who has an interest in the preparation and professional development of technology teachers. Its members are primarily from North America, but the council has members from countries outside this region.

The council exists to serve the profession and has defined its arena of service through

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Current editorial plans are to include articles in future issues. The objective is to provide members of the technology professions a comprehensive portrait of professional organizations that exist throughout the world. Some serve students, others industrial and business practitioners, and others are devoted to teachers on various educational levels.

The progress and strength of the professions in technology rely on the dynamics of viable professional organizations. We believe it is in the readers' interests to participate in, contribute to, and enjoy the professional benefits of one or more of these organizations as appropriate to the individual's status and needs within a technology profession. JS

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three purposes that are stated in its bylaws:

1. To support and further the professional ideals of technology education.
2. To define and strive to achieve the purposes and professional goals of technology teacher education, and to enlist the greatest possible number of people in this endeavor.
3. To stimulate research and the dissemination of information of professional interest (CTTE, 1995).

These goals are essentially the same as propagated by the ACIATE in 1975 in which the council constitution and bylaws stated that the organization

strives to fulfill three principal purposes: (a) To support and further the professional ideals of industrial arts education, (b) To define and strive to achieve the purposes and professional goals of industrial arts teacher education, and (c) To stimulate research and the dissemination of information of professional interest. (ACIATE, 1975)

COUNCIL STRUCTURE

The structure of the council can be viewed in two ways: its structure within ITEA and its internal governance structure. Within ITEA, the council is one of four groups that are provided council status. This status allows the group to have one member on the ITEA board of directors. The person who represents CTTE on the ITEA board is the council's immediate past president.

The council's activities are managed by five elected officers: president, vice-president, secretary, treasurer, and immediate past president. Their duties, as described in the council's bylaws (CTTE, 1995), are:

President. Chairperson of the Executive Committee; responsible for the promotion and advancement of the Council; preside at all meetings of the Executive Committee, the Executive Assembly, and the annual business session; responsible for the Accreditation, Graduate Studies, Research, and Undergraduate Studies Committees; act as general chairperson of the conference activities; ex officio member of the Publications Committee.

Vice-President. Chairperson of the annual Conference Program Committee; responsible for the Professional Development and Publications Committees, the Newsletter, and the CTTE Conference Program; if office of the President is vacated, the Vice-President shall automatically fill the office so vacated and assume the duties and responsibilities of such an office.

Secretary. Record the minutes of all meetings of the Executive Committee, the Execu-

tive Assembly, and the annual business session; send to all members notices of meetings and proposed changes in the Constitution and Bylaws, as previously provided for; be responsible for answering correspondence external to the organization; update the Council Operating Manual, Committee Notebooks, and Council Yearbook records; compile and maintain an updated Committee Membership Roster; process all general mailings to the membership.

Treasurer. Receive and hold the dues and funds of the Council; be responsible for financial planning for the Council; audit any financial matters in connection with publications.

Immediate Past President. Responsible for the Plant and Facilities Committee; act as chairperson of the Nomination and Election Committee and Teacher Educator-of-the-Year Committee; serve on the Collegiate Student Association Committee; represent the Council as a member of the Technology Education Collegiate Association Management Board; serve as the Chairperson of the Yearbook Committee; serve as a Director on the ITEA Board of Directors.

The CTTE uses a committee structure to carry out its work. The committees and their responsibilities are:

Accreditation Committee. Study program accreditation and develop standards for the accreditation of college and university technology education programs in cooperation with any regional or national agencies with which the Council is affiliated.

Collegiate Student Association Committee. Promote and encourage collegiate student association activities for future technology education teachers.

Graduate Studies Committee. Initiate and promote the study of technology teacher education post-baccalaureate programs, and to make recommendations regarding such programs.

Teacher Educator-of-the-Year Committee. Select the recipient of the Teacher Educator-of-the-Year award.

Membership Committee. Develop and implement plans for maintaining and expanding the membership of the Council.

Nomination and Election Committee. Conduct the election of officers as specified in the Bylaws.

Plant and Facilities Committee. Prepare proposals and reports for improving laboratory facilities for technology teacher education programs.

Professional Development Committee. Increase the professional activities of technology teacher educators and develop programs for increasing technology teacher educators' abilities to deliver in-service programs for

technology education teachers at all levels.

Publications Committee. Select, promote, and supervise all publications, except for the Council Yearbook.

Research Committee. Promote research in technology teacher education and the utilization of research findings for improving technology teacher education.

Undergraduate Studies Committee. Initiate and promote the study of technology teacher education baccalaureate programs, and make recommendations regarding such programs.

Yearbook Committee. Plan, organize, and publish the annual Council Yearbook.

The committees are staffed and chaired by people selected by the executive committee. The relationship between the committee and the executive committee is shown in Figure 1.

CHALLENGES FACING THE COUNCIL

The CTTE faces challenges, some of which are common with the technology education movement and several that are unique to teacher education. These challenges are many and varied. For the purpose of this article, three challenges have been identified and two possible reasons that contributed to each are presented. This list of challenges and reasons is by no means exhaustive but provides a point of departure for further discussion.

Status Challenges

Over the past decade, a number of technology and industrial arts teacher education programs have closed or are in the process of closing (Dennis, 1980, 1995). This phenomenon provides a unique challenge for the CTTE leadership, its members, and the technology teacher education cadre. The question facing them is, "How do we change the status of technology teacher education on the average college campus?" Presently, the programs appear to have low status in their respective academic units. This condition is characterized by many of them not receiving the resources required to help the programs survive and flourish. Of the many reasons for the low status of technology teacher education programs at a number of universities, two are discussed in the following.

Benign neglect. During the 1960s, a new type of major was developed to meet the needs of the industrial world. This program was called industrial technology. It was designed to provide technically trained managers and pseudo-engineers. Historically, many people trained to be industrial arts teachers had gravitated toward these positions. Therefore, it was natural for schools that had industrial arts teacher education programs to offer this additional major. Initially, the same fac-

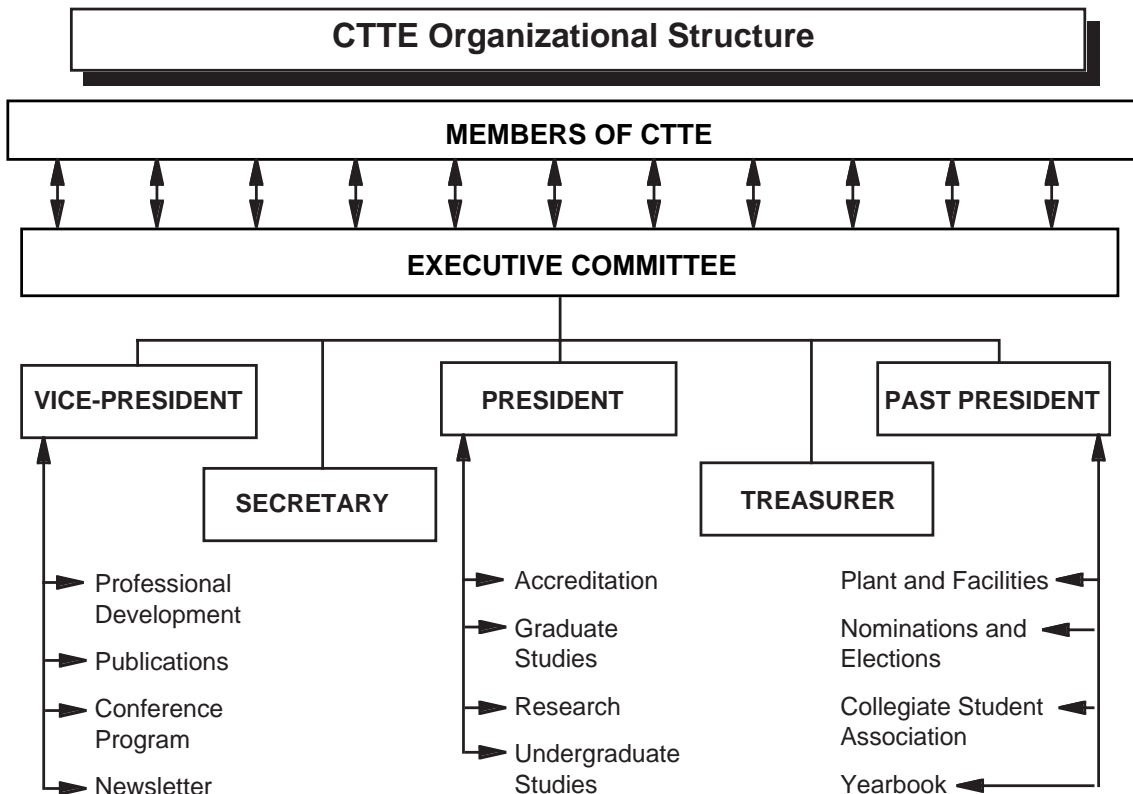


Figure 1. Governance structure of CTTE.

ulty and facilities were used for both programs. The industrial technology students were accommodated in the teacher education classes. As the industrial technology major grew in numbers and prestige, many faculty members and administrators focused their efforts and resources, almost solely, on industrial technology programs and even pursued accredited engineering technology programs. This focus caused a shift in which the teacher education students were viewed as less important than the new industrial technology students. As a result, the industrial arts teacher education classes were changed to meet the demands of the students in the new program. The classes became more and more technically sophisticated and abstract, leaving the teacher education student to learn about teaching industrial arts, and later technology education, in one or more methods classes. Little or no effort was expended in the technical classes to provide a model of good teaching or effective technology education activities. This problem was compounded by a number of faculty who seemed ashamed of their industrial arts heritage and tried to distance themselves with their past training and allegiances. Many of them stopped encouraging students to major in teacher education and failed to support the local, state, and national teacher education associations.

Budget and prestige. During the 1980s, many universities were faced with severe budget cuts. The administrators in these institutions cut luxuries first, then froze salaries and expenses, and finally started eliminating programs. On many campuses, the needs of society for certain types of trained people to fill jobs were only causally considered as programs were eliminated. Often the status of programs was the first and most important consideration. Few engineering, medicine, and/or law programs were eliminated. At the researched-based universities, where education programs were generally held in low esteem, many teacher education programs were curtailed or eliminated even in the face of a predicted teacher shortage. Since industrial arts or technology teacher education programs often held low prestige in colleges of education, they were among the first to be eliminated when college or department budgets were slashed. In the departments that had dual teacher education/industrial technology functions, the teacher education programs often went or suffered more severe resource cuts than did their associated industry preparation programs. The argument often given was that the student numbers did not warrant saving the program; however, the benign ne-

glect of the 1960s and 1970s ensured that the numbers were not there.

Curriculum Challenges

Teacher education programs are facing a curriculum crisis. Some faculty members have resisted the change to technology education while others have not had the resources or political power to make the change. The efforts of CTTE and ITEA to implement technology teacher education standards in conjunction with the National Council for Accrediting Teacher Education (NCATE) have identified what a good program should be. These efforts have also caused a number of institutions to significantly modify their teacher education program. However, there is still curriculum changes that need to be made on many campuses. CTTE seems to be the major vehicle to stimulate this change.

There is some evidence that change is not happening in a number of universities. The failure to make needed change can be attributed to a number of factors including the following:

Lack of control. As stated earlier, in many cases the technology teacher educator has control over only the professional sequence classes and must depend on the good faith of other faculty to deliver appropriate and meaningful technical content. The growth of industrial technology and engineering technology programs has presented a serious dilemma. Those programs generally focus on an in-depth study of fairly narrow areas of technology. They may offer a series of CAD courses or courses in robotics, hydraulics, CNC, and other similar topics. On the other hand, the technology education movement calls for a broadly educated teacher who understands topics such as control (integration of mechanics, electronics, hydraulics, pneumatics, etc.), automation (integration of CAD, CNC, robotics, etc.), communication (integration of technical graphics, desktop publishing, and electronic media). Many programs unrealistically expect the technology teacher education student to take a group of very specific, and often unrelated, courses designed for other majors and somehow develop the large picture without guidance from the technical course instructor. Also, the future teacher is expected to develop teaching skills and integrate the content from isolated technical classes in one or two professional classes. This expectation is unrealistic.

Lack of motivation and reward. Many technology teacher educators have failed to provide leadership for the change from industrial arts to technology education at their institu-

tion or in the state they are supposed to serve. This is often the case because the university reward system does not encourage this type of behavior. Often, little or no credit toward tenure or salary increases are given to university personnel who work with public schools to implement change. Without engaging in this type of activity, faculty members become disassociated from public school activities and develop unrealistic views of the technology teacher education program that is needed to prepare future teachers for elementary and secondary schools. The strong emphasis at many universities in research and publishing in scholarly journals directs the faculty members' perspective away from everyday problems associated with implementing technology education. It also encourages faculty members to spend less time honing teaching skills that can become models for their students or the foundation for in-service programs for teachers who are implementing technology education.

Membership Challenges

There is an old saying that with numbers comes power. This is true with all professional associations. Those with large numbers are more readily listened to than those with small memberships. Also, a large number of dues-paying members allows the association to develop more materials, provide better services, and otherwise support the professional growth of its members. However, the membership of CTTE is declining. There are at least two reasons for this:

Smaller population. The number of people who claim to be technology teacher educators is shrinking as industrial technology and engineering technology programs replace retiring faculty, who were traditionally industrial arts types, with trained engineers. In addition, program closures have reduced the numbers

even further.

Change in attitude. There has been a cultural shift that has changed the value of people. Fewer individuals believe that they should dedicate a portion of their time giving service to their profession. There is a growing attitude that asks all professional associations, "What have you done for me?" or even more harshly, "What have you done for me today?" An increasingly smaller number of people are looking for ways to serve. This change in attitude means that an ever-shrinking population of contributing professionals must produce a more diverse array of services demanded by the new and growing "what's in it for me" group. This places an almost unrealistic expectation on the true professional to meet the passive members' expectations and, therefore, a growing number of people fail to renew their membership each year.

The Council on Technology Teacher Education will be 50 years old as the new millennium is ushered in. It has a long history of promoting industrial arts and now technology teacher education. It has met many challenges and made lasting contributions through its committee work, conference programs, and yearbook series. It probably faces its most severe challenges as universities downsize and change priorities. If the council and, even more importantly, technology education are going to exist, a revitalized effort led by dedicated teacher educators must be mounted to develop and deliver new curriculum approaches, recruit teacher education students, and implement a system to nurture professional development. Also, university administrators must re-evaluate the present system that rewards people for writing and presenting to other university people and downplays the practitioner-based work that is vital for improving the quality of technology education and technology teacher education programs.

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