CTTE Monograph 15

Preparing Manuscripts for Professional Publication in Technology Education

Dr. Jane A. Liedtke
Editor

Publication Committee

Dedication

The Council on Technology Teacher Education dedicates this 15th monograph, *Preparing Manuscripts for Professional Publication in Technology Education*, in recognition of the lifework of George A. Fischer, Chairman of the Board of Goodheart-Willcox Publisher.

Throughout his 42 years with Goodheart-Willcox, George Fischer was dedicated to his business, constantly promoting the product line, and searching for new manuscripts. You undoubtedly remember George as the cameraman who took thousands of Polaroid pictures with appropriate props during AIAA and ITEA conventions. George Fischer was devoted to his family, church, and friends.

George Fischer and Floyd Mix of Goodheart-Willcox Publisher were very supportive of the national organization by providing constant encouragement, and financial support in lean times. As a major contributor of the *Industrial Teacher Education Directory*, Goodheart-Willcox has fostered communication among the members of CTTE. This 15th monograph in the CTTE series provides a guide for use by the technology education profession in preparing manuscripts for publication; a fitting tribute to the memory of George Fischer.

Table of Contents

Preface

This monograph is designed to aid technology educators as they write and submit manuscripts for publication in appropriate journals. Although many faculty members are recognized for being outstanding instructors, few actually take the time to publish. Technology teacher educators should share their research with others in the profession. Classroom teachers must help others learn from their successes with students and the technology education curriculum. The intent of this monograph is to provide a step-by-step process that would increase the probability of publishing success for all technology educators.

Chapter 1

Decide to Publish!

There are many reasons why technology educators as academic professionals submit scholarly articles and other related materials for publication. The primary reason is to document research and activities in the discipline so others can build on an expanding body of knowledge. Another reason is the self motivation to achieve personal and professional success. In the academic community of today and most likely the future, faculty are faced with the reality that such scholarly activity is essential.

Publishing contributes to each educator's professional growth and development by facilitating in-depth examination of issues and trends in technology education. It enables the consolidation of information gathered through research or experimentation. People who publish often seem to be aware of what is current in their profession because they are also reading more frequently and keeping up with the research and professional literature.

A person's professional status improves when quality articles are published in professional journals. People recognize the name and associate it with the topic. Not only does this bring personal recognition, but it enhances the reputation of the department and institution where the author is employed. A series of articles appearing in the same journal from authors within the same department shows strength and professional commitment. This aids in attracting quality undergraduate and graduate students, faculty, as well as external funding. Publishing can actually become a recruitment tool when the appropriate journals are targeted.

The sharing of personal expertise about an educational or technical area, process, system, product, or experience influences other professionals and encourages them to pursue further related research and development activities. It provides a vehicle for others to change and grow.

Professional organizations and associations representing technology educators need articles for their publications. Publishing, therefore, not only is a plus for the faculty member, but it provides a service to the organization. Topics can be of the author's choice or predetermined by the journal editor. Whichever the case may be, the fact that an article is needed can be a powerful motivator.

Within the university environment, the need to prepare for tenure and promotion necessitates the preparation and acceptance of scholarly articles for publication. These events bring pressure on individuals to succeed in the publishing arena. Often there are monetary rewards associated with the attainment of a promotion, or tenure may bring job security at the institution. Departmental reviews and evaluation processes typically include a component of scholarly productivity which implies research and publishing. Even without the security or monetary rewards often associated with writing to gain a positive evaluation, it is the wise professional who continues to share with others the fruits of his or her expertise and research.

When a regular pattern of publications are part of the career the professional resume or vita continues to grow with consistency. Such development enables other financial rewards, such as consulting, speaking engagements, international involvement, and/or external funding for research.

Whether your personal motivation is internal in nature or comes through external influences, the rewards of publishing will continue to return to you over the years. Determine now how you will function within the publishing system! Establish your personal needs and goals! Make a commitment to yourself!

Set Goals and Develop a Timeline

The commitment to publish is easy to make; fulfilling that commitment is another matter. We all have good intentions and often start out believing that we will schedule ourselves for the time it takes to prepare and write an article for publicaiton. Adhering to the schedule becomes difficult when other interests and obligations begin to demand our time and energy. We may even feel guilty when we haven't lived up to our own expectations, even though the situation appears to be out of our own control.

Gaining control over life in general, and time specifically, is the first step in realizing a professional publication record. That is easier said than done; and yes, there are other people involved in your personal and professional life that exert

their influence on your schedule. It's up to you to determine how to gain control over your time. Start with something tangible, like short-term and long-term publishing goals.

Goal setting is not a new topic for faculty members. Faculty ask students to prepare materials in a timely manner. Somehow that usually seems easier because a time structure - the semester or class time - is already provided. Long-term goals might be best described as an overall plan to develop a publication record, and short-term goals are the immediate actions which will enable you to successfully attain the long-term goals.

Long-term goals require sensible planning, commitment, and consideration of the future events which will impact on your career. One long-term goal might be to attain tenure, promotion, or both. A careful examination of the specific requirements for each of those possibilities will provide you with targets and details needed for realistic goal setting. If your long-term goals will encompass tenure or promotion it is wise to review the appropriate promotion and tenure guidelines from your department and university.

Other long-term goals might be to have a certain number of publications in refereed (peer reviewed) journals by a specific year. Another might be to have articles in several journals each year. A reasonable long-term goal would be to conduct a research or funded project which would yield sufficient information for several related and follow-up articles. Co-authoring a series of articles with a colleague or someone from another institution might be another long-term goal. Co-authorship has a built-in system which encourages the completion of publications. That's not only the commitment to yourself but to someone else.

Take some time to examine your long-term goals based on your career aspirations, your goals regarding promotion and tenure, and the contributions which you could make to the profession. Utilize a system to list for yourself a few realistic long-term publishing related goals. This is your first commitment step.

Once you have your long-term goals identified, you will be able to begin making short-term goals. These are the specific annual, monthly, or weekly events and tasks which will need to happen in order for you to realize your long-term goals. In conjunction with setting the short-term goals should be the development of a timeline. Some people utilize a flow chart format, others a pert chart or a listing of contingencies which must occur, in sequence, for the goals to be realized.

Examine the following long-term goal: *Publish three journal articles each year, of which two are refereed.* For this type of goal, you will need to list the steps it will take to accomplish the goal and place personal deadlines on each task. Set aside the time each week to prepare your manuscript. Later in this monograph you will learn more about selecting your topic, targeting a journal, gathering resources, developing the outline, writing the manuscript, editing and revising the manuscript, and submitting it for publication. Each of these activities requires a substantial commitment of time and is more easily accomplished when the time is dedicated each week for doing only publishing activities. Schedule that time just as you schedule your time for a class. Make yourself unavailable for meetings and other interruptions. This may mean closing the door and unplugging the telephone. Your home office or the library may yield much more productive time than your office at school.

One way to approach finding the additional time it takes to develop a publishing record is to ask yourself the following four questions:

1. What am I doing that doesn't have to be done?
2. What am I doing that could/should be done by someone else?
3. What am I doing which could be done more efficiently?
4. What am I doing which wastes the time of others?

These questions should allow you to find at least two to four hours per week to work on the preparation of articles for publication. Select a block of time and dedicate that time to this purpose, and stick with that schedule! Again, it's a commitment factor that must be maintained. Imagine how much you could accomplish with just two to four hours of time per week during the school year... that's two to three weeks of writing! It should be possible to submit several articles with that quantity of dedicated time, so examine your personal time schedule and find for yourself the two to four hours per week.

For each long-term goal which you noted previously, make a listing of the major tasks you will need to complete. For each major task, assign a personal due date or time frame. Use your 2-4 hours per week to finish that portion of the task. By following an outlined list of work which needs to be completed, you are actually in a better position to complete tasks.

Complete a timeline you intend to follow during the remainder of this school year and next year. Place these dates and time allotments on your calendar and be ruthless. Don't let others consume those time frames for other activities or events. If it is absolutely necessary to adjust your schedule to accommodate a meeting (or similar obligation), then find that quantity of time during the same week and set it aside. Get into the habit of saying "I have other plans during that time and would appreciate it if you could reschedule the meeting to: " (and give an alternative). Once you get out of the writing routine, it is much harder to get back into it again. Avoid that option! Make copies of each of the long-term goals you have listed. Post this on your wall near your desk or in some prominent place where you will be reminded of the tasks and timeline. Some faculty members find it helpful to ask a colleague to monitor the schedule and remind them of their commitments.

If you are one who can cheat yourself, involving another person may help! You may have nice success getting things done if you share your time line(s) with your colleagues or co-authors and then do your best to accomplish the tasks involved in publishing. Some faculty make a regular practice of meeting colleagues for lunch and spending that time sharing information, comparing notes and schedules, and planning subsequent activities. In this way, they achieve their timeline and objectives by involving others and have some social time besides.

Select a Topic

Some technology educators seem to have no trouble regularly generating publishable ideas. they take the ideas, write manuscripts, and send them to be published like clockwork. However, most of us are not so lucky. We have to spend time selecting our topics. Rarely do we get brilliant ideas in the middle of the night, and when we do, we're usually too sleepy to record them. Thus, a more organized approach is proposed.

The following sources may help provide direction and assistance in identifying topic ideas. All of them require a careful look at common, everyday matters.

Your Research Interests

Most college and university faculty settle on one particular area of research in which they specialize and devote more of their research

efforts. This is known as a "line of research." Have you been involved in a line of research for a period of time? Is it all "played out" like an exhausted gold strike, or is there still enough there to become a good article? Often a follow-up or revisitation of research after several years' hiatus (such as the time between your dissertation and your first article from it) can provide a topic and content. If someone else has published on the same topic you once treated, for example, it might be time for a response to that article or a view from a different perspective.

Maybe it's time for some new research? Have you some ideas worth funding or exploring on your own but haven't established your priorities to do so? To obtain material and supporting data for a research-based publication your efforts may need to be directed toward a new research project. The office of research and grants at your college/university can assist you in identifying sources of funding for your researchable ideas. As you plan to conduct a research project, determine what strategies you will use to turn the results into a meaningful publication. This can become part of your research plan.

Some journals within education and technology education expect that manuscripts submitted for publication are based on research activity. Whether that research was basic or applied, the intent of the journal is to provide the profession with the scholarship generated from research in the field.

Unanswered Research Questions

Almost every research study uncovers more research questions than it answers. These questions are usually stated quite clearly and succinctly in research journal articles, research reports, theses and dissertations, and may provide excellent sources of ideas for publication. Would-be authors can take advantage of these sources by looking for unanswered questions that previous contributors were not able to bring to closure. In particular, theses and dissertations usually include a list of questions for further research in the last chapter. These lists are excellent places to find unanswered research questions.

Your Expertise

If you have developed specialized knowledge in a particular area of education, technology, or technology education that others

need to know about, why not use your knowledge as a source for publication ideas? One thing you probably know a lot about is the area in which you do consulting. The results of your consultation might be worth writing and submitting, especially if you helped improve someone's performance or capability. Truly, the value to the profession of individual expertise can only grow with time and greater depth of knowledge.

Your Presentations

Every presentation has a potential manuscript and publishable topic within it if it is worth presenting!

When organizing to give a presentation at state, regional, national, or international conferences, consider preparing the presentation in the form of a manuscript. Since you will be researching the topic and planning the presentation it will not be difficult to write a 10-16 page paper on the topic. You may have already given presentations and filed them away. Those presentations may already contain a problem statement, background information, a literature review, description of methods, and results of the investigation or activity. A little more work and polishing may be all that is needed to convert presentations already given into a publishable manuscript. Can you give a new perspective on a topic which you presented some time ago?

New Technology and Curriculum Developments

Have there been recent technological developments or new curriculum efforts in your field? Have you implemented new technologies or new curriculum models in your technology education program? Perhaps you have looked into some of them, or maybe you have heard reports from your colleagues in the field who have experienced the implementation of new technologies or the results that came with new instructional approaches. In any case, each development probably contains enough material for a manuscript, especially if it can be followed up with current results from the field or additional descriptions and future implications. In a profession such as ours, new developments should provide us with a virtually endless source of publication ideas.

Changes in Processes

Technological innovation or change often causes changes in processes or procedures to increase efficiency or productivity on the basis of need and without much research or publicity. Recent process changes or new wrinkles in techniques might be appropriate for sharing with the profession in the form of an article. Changes in technological processes sometimes have significant and far-reaching implications. They should be documented so they can be replicated if they work well, and discarded if they do not. New processes can be compared with past practice, examined for current applications, or projected towards the future. Each of these possibilities can provide the basis for a good article.

Problems and Solutions

It's hard to go wrong focusing on problems and solutions. The most bothersome and trying problems that you face are probably faced by many of your colleagues, and if you have solved them or even made them a little easier to deal with, your words of wisdom will be eagerly read by others. You probably have a wealth of ideas, anecdotes, and experiences to draw from and plenty of interesting and useful methods or shortcuts to success that you have developed over the years. Why not write some of them down so others in positions like yours can benefit from your thinking? If your classroom experiences resulted in curriculum, lesson plans or new courses, the end result might be a professionally published textbook or workbook, leading to pleasant financial rewards. If your technical research generated less expensive, more efficient, or safer ways to do things, you should consider sharing this knowledge with others through journal articles.

Student Activities

Have your students done anything particularly noteworthy lately? Chances are they have. They may have developed new approaches or processes for classroom or laboratory problems, taken political action to benefit the profession, become involved in basic or applied research, or just come up with some good publication ideas by saying they can't find enough information on a particular subject. Perhaps local student organizations have taken on some interesting projects. Or maybe they have won awards or

demonstrated exceptional leadership ability. These and other student activities are worth considering as a source for publication material. The journal(s) may have a particularly large readership and there may be many students from around the country who would be interested in reading about the successes of your students.

Call for Papers and Theme Issues

Professional associations and journals often submit calls for papers or manuscripts, but they may do this in quite different ways. The professional associations tend to identify topics that they feel are needed in the profession, and distribute fliers or advertisements to solicit responses from authors. Journals submit calls for papers by prominently displaying author information or theme requests in each issue. If there is an author information page in a particular journal that you enjoy, perhaps you need to consider writing on a related topic for that journal. Sometimes the calls for manuscripts become even more specific, as when a journal declares a theme issue. In that case, the editors are looking for a collection of articles around a main issue or concept. These issues are usually announced 8-12 months in advance, so you have plenty of time to develop an article that is related to the general idea or topic. It is wise to contact the journal editor prior to preparing an article to meet an announced theme. In doing so, you can determine if a particular manuscript is needed or if sufficient manuscripts have already been submitted and/or accepted on the topic.

Timely Interests and Topics that have Currency of Thought

Sometimes one can get published easier by writing on a topic that is currently popular. It isn't always necessary to write on an issue of world-wide significance in order to get published. If a particular idea is one whose time has come, or one that captures the interest of a number of professionals in a particular field, an article based on that idea has a good chance of publication, even if it doesn't have great long-term significance. Look to the popular press, newspapers, or television for these ideas, and be ready to move fast. An issue or theme that is "hot" now may be old news in six months. Even if an idea only has currency of thought for a short time, you may still be able to make a contribution if you keep on top of the

timely issues and respond with a manuscript while the idea is still viable.

In sum, the approaches suggested, and others like them, have been effective idea generators for faculty who wish to publish in the professional literature. Put these ideas into action, and discover that you are surrounded by innumerable good, usable, publishable ideas!

Chapter 2

Target a Specific Journal

Prior to selecting a journal, it is appropriate to determine the primary purpose for writing the article. If the article is to be used to support a promotion/tenure decision, you might select a "refereed" journal. In education circles, the term "refereed" carries with it the connotation that it has been reviewed by peers and is, thus, an article of high quality. Whether or not this is true may be debatable; however, the fact is that a refereed article will provide greater support in your quest for promotion/tenure than one that is only reviewed by the editor of the publication.

Another reason for publishing may be to enhance the image of the department and your instructional area. This may make it easier to recruit students, locate resources from industry, and enhance your potential for external funding. In this case, simply select a journal that is commonly read by the persons you are seeking to reach. Having determined the overriding purpose for publishing the article, a close review of the potential journals is in order.

Once you know the topic and nature of the article you plan to write, you need to select the appropriate journal. There are a variety of journals to consider which serve the technology education profession (See Appendix A). Somewhere near the front of most journals you will find a listing of the purpose of the journal, the editor, the address, copyright information, etc. Some journals also include guidelines for the preparation of a manuscript (See Appendix B). If those guidelines are not located in the journal, you can request them from the editor. At the same time, you should inquire whether or not themes have been established for upcoming issues. You should share the topic of your article with the editor and inquire whether or not, in the editor's opinion, it would be received favorably by the readership. Of course, an affirmative response is no guarantee that your article will be published, but it can certainly put you on the right track.

Each journal has a target audience. There are two journals for members of the International Technology Education Association. For example, *The Technology Teacher* is primarily written for elementary, middle school, and high school technology education teachers and emphasizes articles which practitioners could use with students. There are also refereed articles within *The Technology Teacher*. The *Journal of Technology Education* contains mostly research-based articles which have been through the referee review process. It is read by a wide range of professionals and articles are typically submitted by college or university professors, graduate students, and others conducting research in the field. It follows, then, that if the subject of your article would be of interest to either of these groups, a search for an appropriate journal would be complete. However, there are many journals and periodicals to select from. Each of them has their own target audience, and it is up to you to determine which group will have the most interest in the subject of your article.

You may also want to consider the acceptance rate and publication schedule of the journal. As a rule, most authors elect to send their manuscript to journals with low acceptance rates because they tend to have the highest prestige. On the other hand, they realize their chances of acceptance are low, so they immediately begin looking for an alternate journal in the event their manuscript is completely rejected by the first one.

Ethically, a manuscript should only be submitted to one journal at a time. Articles which have been accepted and/or published already should not be submitted to any other publication for consideration. The only exception is when a reprint of the article has been invited by another journal and arrangements have been made with the journal which holds the copyright on the original publication.

And, finally, the type and style of your article will, in some measure, determine which journal is appropriate. For example, a highly technical research-oriented article is not likely to be accepted by a journal that is primarily read by classroom teachers. On the other hand, a research-oriented journal will not accept a descriptive article written in conversational style. So, again, it will be up to you to match the style and nature of the article with the appropriate journal.

Chapter 3

Gather Resources

There are about as many ways to gather resources for publication as there are subjects to write about. One of the most obvious resources is the library. Most university libraries generally have many volumes and a large amount of material on microfiche. For purposes of library research in our profession, there are several main sources. One is the large selection of journals devoted to technology and related subjects, including technology development, technology implementation, and technology education. Taking a tour of the library at your institution(guided by a librarian) is an easy way to find out where all of these resources are located.

The computer is quickly becoming the best way to search extensive resources and databases, libraries throughout the world, and those closer to home. Accessing the Internet and World Wide Web of computer networks will provide countless sources of documents and supporting information for most topics. Most college/university campuses have provided access to the Internet to their faculty and students and many public schools and communities are now on-line.

Through the use of the Internet it is possible to search specific libraries, regional library consortia, The Library of Congress, and libraries dedicated to specialized topics throughout the world. It is also possible to search such documents as the Federal Register or go on-line with the National Science Foundation. If you are not yet on-line through a campus or community connection you may want to consider one of the commercial services available locally or nation-wide (such as America On-line, Compuserve, etc.). This will require that you have a computer, modem, and phone line to use during the process.

Local book stores will have a bountiful supply of "how to" books on accessing and using the Internet. Some include trial connections and time on-line with the purchase of the book/software. This investment of time will return to you several fold as the process of researching background for an article or technical data comes together. Expland upon resources using the references in prior literature.

Primary vs. Secondary Sources

Primary sources are the original documents or written material. They represent the best source for original information and allow the writer to make the clearest possible interpretation of previous research. Secondary sources are citations of the primary works that are found in other journals, studies, or abstracting services. Secondary sources are useful to the writer but may not contain all the information about the original work that is really needed, so it is often necessary to read the original source before citing it.

Original source documents are often unavailable to the researcher unless the materials are located in local or regional libraries, museums, or other depositories. Authors able to use source documents in their writing are often held in very high esteem within their profession.

You should consult the latest edition of the *Publication Manual of the American Psychological Association* for instructions on how to cite primary and secondary sources.

Develop a Library Search Strategy

Develop your level of knowledge/ability to collect resource information by examining each of the following:

- Review the subject of inquiry.

- Clarify your background on the subject.

- Identify the library's resources.

- Improve your ability to access those resources.

- Assess the availability of external resources of information.

- Establish a time frame available for the literature search.

- Keep in mind the nature of the anticipated final product.

Conducting meaningful library searches takes a commitment to several steps. Attention to these steps insures that all possible resources have been reviewed and that the information needed to prepare for the article gets gathered.

Step one:
Visit your local library and explore the "on-line" catalog service. Locate the ERIC documents and learn how to access via CD ROM. And last but not least, learn how to access using the computer the various databases and indexes.

Step two:
Select a topic that is challenging and interesting. Make sure it is within your research ability. Determine if there is sufficient original data available to conduct a meaningful investigation. Keep digging beyond the obvious sources and references. Don't give up if initially you find v ery little to support your topic.

Step three:
Delimit the selected topic. What is the purpose of the research? Who is the audience? What is the perspective? What is the expected end product? How much time and money can be alloted to the project (such as on-line search costs or the cost to conduct any research associated with the article)?

Step four:
Begin the literature review!

Step five:
Take complete bibliographic notes:
> Author
> Title
> Publisher
> Date of Publication
> Call Number
> Volume, Issue, Date, Pages
> ISBN
> Other information/Notes

Step six:
Read and review books, monographs, and other sources. Expland upon resources using references in prior literature.

Step seven:
Identify periodical literature (journals, magazines, professional and trade publications).

Step eight:
Evaluate periodical literature.

Step nine:
Build a strategy to identify other sources of literature (original documents, interviews, government documents, industry reports, conference presentations, etc.).

Step ten:
Construct a bibliography in APA format that you will draw upon as you prepare the manuscript. Eliminate those which will not be references or cited in the text portion of the document.

Library Resources

Most community and college/university libraries will contain or have access to the following common reference materials and guides:

- Card Catalog or On-Line Catalog
  Books by author, title, and subject.
- Books
  Cummulative Book Index
  Book s in Print
  Subject Guide to Books in Print
  The National Union Catalog
- Book Reviews
  Book Review Index
  Current Book Review Citations: An Index to Book Reviews
  Book Review Digest
- Bibliographies and Dissertation Abstracts
  Bibliographies Index: A Cummulative Bibliography of Bibliographies
  Bibliographic Guide to Education
  Dissertation Abstracts International
  Comprehensive Dissertation Index
  A Guide to Thesis, Dissertations: An Annotated, International Bibliography of Bibliographies
- Periodical Indexes
  Poole's Index to Periodical Literature
  Education Index
  State Educational Journal Index
  A User's Guide to Periodical Literature
  Social Sciences Index
  Index to Legal Periodicals
- Abstracting Services
  Master's Thesis in Education in the U.S. and Canada
  Thesis Abstracts International
  Dissertation Abstracts International
  Psychological Abstracts
  Sociological Abstracts
- Educational Resources Information Center (ERIC)
  Current Index to Journals in Education
  RIE or CIJE Resources in Education
- Citation Indexes
  Social Sciences Citation Index

- Statistical Sources
    - *Bureau of Census Catalog of Publications*
    - *Statistical Abstract of the U.S.*
    - *Historical Statistics of the U.S.*
    - *American Statistics Index*
    - *Statistical Reference Index*
    - *Digest of Education Statistics*
    - *The Condition of Education*
    - *Standard Education Almanac*
- Other Sources
    - Indexes to Current Events
    - Newspaper Indexes
    - International Reference Directories
    - *Mental Measurements Yearbook*
    - *Tests in Print*

Access to Library Sources

Many libraries have computer terminals capable of locating resources anywhere in the library or for loan from other libraries. All you have to do is to follow the user-friendly instructions to locate sources by title, author, or subject area. Terminals may also be tied to the specific data bases; thus, it is possible to locate almost any desired source with just a few computer commands from one of the many terminals located throughout most libraries.

Most libraries provide access to professionals who are knowledgeable about the library holdings and resources. They are also generally familiar with what is available in related areas and can assist with conducting computer searches.

On-Line Searches of Databases

Because information based on research takes time to find its way into the literature and technology is developing so rapidly, it is important to consider the on-line computer search as a source of readily accessible information. An on-line search is an interactive, computer-based, real-time search of an existing data base, usually via long distance telephone line. It can result in on-screen citations, a hard copy printout of citations, or a more complete abstract of germane articles received several days later through the mail. The ability to down-load the information to your own computer or to disk is another option.

To conduct a successful on-line search of a database such as ORBIT it is necessary to determine what descriptors best fit your topic. If the article was going to be on new communication

technologies it would be wise to try some technical terms such as fiber opitcs, holography, etc. They alone might yield hundreds of "hits" or possible sources of information. It may be necessary to be much more specific and link the descriptor fiber optics to future applications or to research and development. Thus, the topic is narrowed further and your "hits" will likely be more usable for background in the manucript. This is one reason that the on-line search should almost always be done with professional help or with the use of a data base thesaurus of descriptors.

Some typical databases to search include:

- Lockheed Corporation's DIALOG
    - Over 130 databases with 35 million + records such as:
        - *Encyclopedia of Associations*
        - *GPO Monthly Catalog*
        - *Dissertation Index*
        - *National Newspaper Index*
        - *ERIC*
        - *Psychological Abstracts*
        - *Sociological Abstracts*

- System Development Corporation's ORBIT
    - Over 70 databases with an emphasis on technical and scientific information.

- Bibliographic Retrieval Services BRS
    - Over 30 databases.

Abstracting Services

To keep up with the literature, many abstracting services offer summaries of individual articles in comprehensive listings that are keyed to the original sources. The abstracts are also keyed to several cataloging systems so the original sources maybe easily located. Abstracting services are particularly useful for reviewing and evaluating large amounts of data to see if specific articles or studies need to be read in their entirety or if they are not quite related to the research. Some examples of abstracting services were mentioned on pages 8 and 9. Some others are: Education Abstracts and Chemical Abstracts. They are all considered secondary sources of information and should be treated accordingly in your manuscript.

Internet Resources

Keeping up with the multitude of addresses (locations) of information available via the Internet is a monumental task. The best way to keep current is to maintain lists of your most frequently used addresses and obtain a copy of the *Internet Yellow Pages*. A listing of all possible usegroups is maintained at MIT and this information can be downloaded periodically to your own computer. See also the Selected References and Resources provided on page 19.

Your local library or computer center is also a source of information and can aid in providing the Internet address or telephone number to connect via modem to the library.

Commercial companies such as America On Line and Compuserve provide acess to the Internet for a monthly fee.

Other Sources of Information

. There are, of course, many other sources of information. Useful information sources are limited only by the imagination. In our field we should consider papers and presentations at conferences, observation of processes and procedures, talking with other professionals in the field, seeking information from recognized leaders, government documents, or patent records.

Many corporations have their own libraries, librarians, research and development offices, and publications explaining their products/services. Also, some professional associations maintain data bases, have holdings of materials related to the discipline, and offer publications to researchers.

Whatever the source, you should make careful notations of pertinent information and arrange them in a card file, on a computer, or other data system that is convenient for you. If your system permits cross-indexing for relating different topics together, you can easily put it in some kind of logical order for presentation. Now, you are ready to begin writing!

Ending the Literature Search

There comes a time when you must decide when to end the literature review. Unfortunately, no single rule exists for making this decision. One method that seems to work fairly well is to take

notice of diminishing returns as your literature search continues. If you find fewer and fewer applicable source with each new data base, it may be a sign that you are approaching the end of your search. Another sign is the appearance of many of the same sources across several data bases. Most authors use some combination of these indicators to signal that the literature search is nearly done and it is time to begin writing.

Chapter 4

Prepare the Manuscript

Develop an Outline

Prior to writing the manuscript, it is always advisable to begin with an outline. The purpose of an outline is to give direction to you as you begin to develop the ideas to be contained in the article. Once you have selected the title, then you should think of three to six subtitles that are somewhat discreet within themselves but, on the other hand, collectively give clarity and meaning to the title in question. Most editors would appreciate having the subtitles identified within the manuscript. Once the subtitles have been established, you can divide them into three to six major concepts. You might wish to think of these concepts as being paragraphs within your article. And, finally, within each concept, identify several elements that are necessary to explain the concept. You may think of these elements as being one or two sentences in the completed manuscript.

As you recall, at some point in your education, your English teacher probably taught you to outline in the following manner.

```
                    TITLE
I.   Subtitle
     A. Concept (paragraph)
              1.  Element (sentence or two)
              2.  Element (sentence or two)
              etc.
     B. Concept (paragraph)
              1.  Element (sentence or two)
              2.  Element (sentence or two)
II.  Subtitle
     A. Concept (paragraph)
              1.  Element (sentence or two)
              2.  Element (sentence or two)
              etc.
     B. Concept (paragraph)
              1.  Element (sentence or two)
              2.  Element (sentence or two)
              etc.
     C. Concept (paragraph)
              1.  Element (sentence or two)
              2.  Element (sentence or two)
              etc.
```

However, since most of us in the field of technology education are far more "visually" oriented, another style of outline might help you to think through the article (see Figure 1). This format has the advantage of clearly describing the relationship of one element to another.

So, begin with an outline! It will help you to write a clear and concise article that the reader can understand.

Write the Manuscript

We have all experienced years of English classes where we learned the rules of writing. The "parts of speech" were drilled into our minds, and many of us had to display our knowledge of these rules by diagraming sentences. Yes, these rules are important to writing with clarity, but by now, most of them are forgotten and we have a feeling for writing grammatically correct sentences without even thinking of the parts of speech. Then, there is the notion of concentration.

Concentration is important in writing. Successful authors have a way of blocking out all distracters and focusing on the goal. This requires discipline and concentration. Once you have attained this state of mind, simply begin to record your thoughts as quickly as possible - don't worry about little things like spelling or grammar. You will be revising your manuscript later anyway, so don't expect a polished draft on the first try. This kind of attitude will help you to be productive. Too often, inexperienced writers are "uptight" because they are afraid they will make mistakes. The biggest mistake of all is to allow this tension to cause you to "clutch" and miss the goal of getting your thoughts recorded.

Writing requires practice. Years ago, Dr. Robert Mager, a prolific author, made the commitment to write one page a day, five days a week throughout the year. Now, he claims that writing each day is the key to becoming a successful author. Over the years, he has been able to reduce the time it takes to reach his daily goal. Now he can often meet his goal before breakfast! Additionally, the quality of his work has improved, requiring less time on revision. So, let us learn from his example and write with regularity.
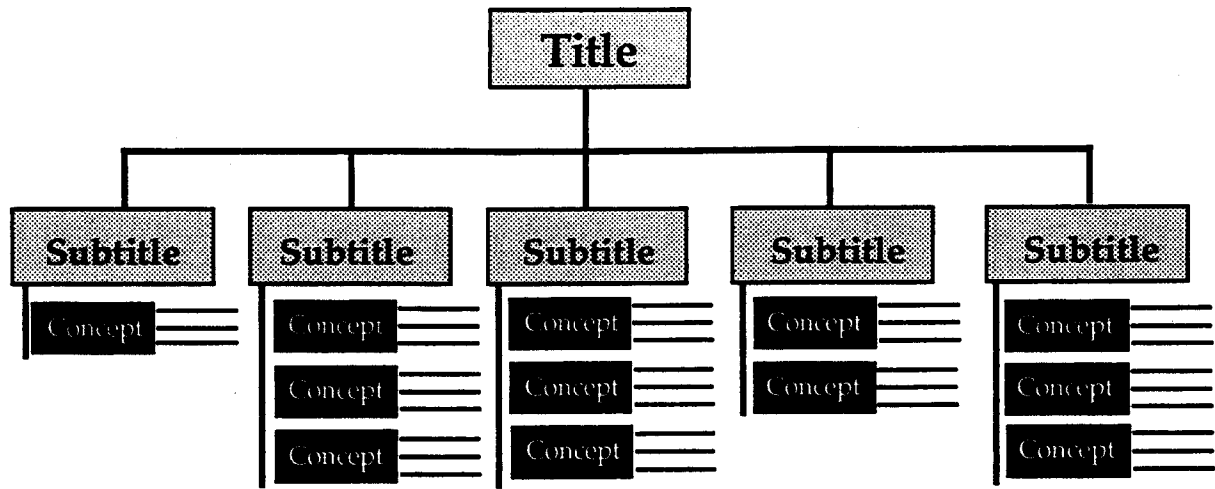
Figure 1. Conceptual Outline Model for Manuscripts.

Before leaving the subject of writing, remember that the outline was developed for a purpose. It was developed to help you record your thoughts in a logical and organized fashion. Each sentence should be related and connected to the former sentence until a series of thoughts develop into a fully explained concept or idea. These concepts are usually presented in the form of a paragraph. A grouping of related paragraphs are connected and give clarity and understanding to themes or subtopics. These, too, are related to each other to fully explain the subject of an article!

Headings and their various levels are often confusing to a writer but useful to the reader. Refer to the most recent edition of the *Publication Manual of the American Psychological Association* for assistance with section headings. Headings not only help the reader locate various key points within the manuscript but they assist the writer in preparing logical and realistic sections to the article.

As you are writing an article, remember the old adage that "a picture is worth a thousand words." Often a graph, diagram, drawing, picture, or other visual can serve to support clear and efficient communication much better than several paragraphs. Since visuals enhance the appearance of a periodical, nearly all editors strongly encourage their use. However, they generally insist that they are submitted in "camera ready" form. These days, this usually means a visual prepared by a CAD or desktop publishing system and a high quality laser or ink jet printer. Of course, carefully composed high contrast black and white photographs and hand inked drawings are also accepted by most journals. Remember that some of the so-called scholarly publications do not include halftones; therefore, photographs will not be accepted.

Several journals will want your completed manuscript on computer disk as well as hard copy. This disk can also include diagrams and graphics saved in standard formats.

That's all there is to it! Follow the outline. Concentrate. And practice. The results will be astounding!

Edit, Review, and Revise

It is an elemental truism of life that we cannot be our own physicians, attorneys, or editors. Because we have a personal investment in what we write, it is difficult for us to review it objectively. We often just do not see what is wrong with the words we have written, and just

because we had a clear notion of what we wanted to say, we assume that the reader will gain the same idea. But alas, we must encode our thoughts in order to transmit them, and then the poor reader must decode the words and try to understand just what we meant. The reader does not always have the same background knowledge or reference points as the author, and is at the disadvantage of relying solely on the words on the paper for information. Clearly, effective ways to revise and polish the manuscript are needed.

Use Others as Reactors

One relatively painless way to revise manuscripts is to give them to colleagues for their reaction. It is a good idea to let someone else read your manuscripts for clarity, continuity, and consistency. Another reader can objectively read the document and identify some of the same problems that editors would find, especially if the reader is knowledgeable about the subject. Having colleagues read your work is a good way to identify problems so they can be corrected before the paper goes out for a formal review. If a colleague is particularly good at editing and knows APA style well, you should seek assistance from this individual.

Read it Out Loud

This is an old trick, but reading a manuscript aloud is an effective way to identify unclear, choppy, or awkward sentences with bad wording or *nonsequiturs* in the structure. The words look different on paper than they sound, and reading a passage aloud is a quick way to pinpoint many problems to be corrected.

Let it Get "Cold"

Another editing technique is simply to leave the manuscript alone for a period of time - to let it get cold - and then come back to it for review. You will probably find that problems will jump out at you when you reread material you have not looked at in awhile. You may find yourself asking, "Did I really write that?" But seeing the problems is the greater part of correcting them, and at this stage, they are still easy to correct. If you have the time to leave the manuscript for a while and then come back to it for review, the manuscript will be improved.

The Editing Process

The editing process should consist of four kinds of editing: 1) editing for format, 2) editing for content, 3) editing for style, and 4) editing for technical accuracy. When editing for format, look at the journal (or journals) you have targeted for publication to identify the type of format the editor of that journal prefers. Some journals require a very tight, scientific format that includes problem, methodology, procedures, results, and discussion sections. Others are much looser and open ended in their requirements. Try to match the format of the targeted journal as much as possible in the manuscript you are preparing.

Editing for Content

This simply means rereading the manuscript to make sure that it says just what you think it says, that it contains all the desired content, and no extraneous or confusing material has found its way into the work. Try to make certain that each idea is adequately developed and that the manuscript conceptually goes where you want it to go and does so without repetition.

Editing for Style

Here again, it is a good idea to review literature similar to those in the journal you are targeting. Some journals require a very formal, scientific, third person style of writing, while others do not accept articles with formal writing styles at all. They want clear, straightforward writing in a conversational style. Just check the style of the journal you want to publish in and adjust your manuscript accordingly. Most refereed journals in our profession use the *Publication Manual of the American Psychological Association* (APA) as the preferred guide for style (see Appendix C).

Editing for Technical Accuracy

There are several ways to look at technical accuracy, but the most important one, from a publication standpoint, is related to your credibility as an author. Most journal editors are not technical experts in all areas themselves, so they use expert reviewers or peers who may be familiar with technical content. Any submission may be reviewed by some of the leading authorities in your field. That is a good reason to read the manuscript just one more time to insure that it is technically accurate and sound, contains correct and precise references, and reflects a high degree of technical mastery.

Models for Manuscripts

Most journals are consistent in the style and format of the articles published. As such, it is wise to review published articles to gain insight into their style and format. Research-based articles usually follow a similar set of sections and headings as would a thesis or dissertation while general interest articles have a more "open" structure usually determined more by the topic than any other factor. The one thing both formats have in common is the need to provide the reader with introductory information, followed by the details on the topic, ending in a summary or discussion section followed by the references cited in the article.

Some technology education journals are very practitioner oriented and as such publish articles which present classroom activities or laboratory experiences designed to be modified and used by teachers with their students. The emphasis in these articles is on the information needed to prepare and conduct the activity. These usually require not only teacher and student appeal but a sense of realism (this can actually be done at most schools) melded with the application of current/future technology.

Format for a Research-based Article

Research manuscripts are typically 15-20 pages in length prior to their publication. While some longer articles may be published it seems apparent that most journals prefer manuscripts within that range. If your article does not provide the reader with information corresponding to the following headings (and their implied contents) then it may be sent back to you for revisions.

Format for a General Interest Article

Authors often have topics of interest to the profession which are not based on empirical research but are a gathering of information pertaining to the topic or are experiences from the classroom. These lend themselves to less structure and rigor in terms of format. Typically subheadings within these articles are determined by the appropriate related subtopics.

Format for a Classroom/Laboratory-based Article

Two types of feature articles are appearing regularly in *The Technology Teacher*. There are Learning Activities and Resources in Technology. These are 4-8 manuscript pages in length, are written in very concise terms, and may result in a 1-2 page published article used by thousands of teachers.

Research Article
Title
Author
Institution

Introduction
(1-4 paragraphs)

Problem Statement
(1-2 paragraphs)

Literature Review
(3-4 pages)

Research Design and
Methodology
(2-3 pages)

Data Analyses and Results
(4-6 pages including
tables and figures
showing statistical analyses)

Findings
(2-3 pages)

Conclusions and/or Discussion
(2-3 pages)

References
(1-2 pages)

General Interest Article
Title
Author
Institution

Introduction/Background
(2-3 pages)

Topical Information
(6-8 pages)

Summary
(1-2 pages)

References
(1 page)

Learning Activities
Title
Author
Institution

Topic/Concept
(1-2 paragraphs)

Objective
(1-4 sentences)

Materials
(listing)

Implementation
(2-3 pages with diagrams
to assist the reader)

Assessment
(1 page)

Resources in Technology
Title
Author
Institution

Introduction to the Topic
(1-2 pages)

Social/Cultural Impact
(1-2 pages)

Analysis
(2-4 pages)

M/S/T Interface
(1-2 pages)

Evaluation
(1 page)

Summary
(1 page)

Chapter 5

Submit the Manuscript

Submitting your manuscript to the appropriate journal is not complicated, provided you targeted your article to meet the audience, requirements, style, and format of the journal. After the manuscript has been written, edited, and/or revised by a colleague, and your revisions have been made, you must ask yourself if the manuscript is ready to submit to the journal. It never hurts to get one more opinion to make certain that the article reads well, is technically accurate, the APA style is correct, and it looks professional. Ask a different person to specifically look for those four characteristics. If possible, select someone who is familiar with the author guidelines for that journal or provide them with a copy for their reference. If no further changes are suggested, your manuscript is ready. Every person who reviews your manuscript will find something slightly different that they think you should change. At some point in time you must stop the editing cycle and send the manuscript on its way.

Refer to the most recent issue of the journal to which you intend to send your manuscript and locate the author guidelines (if you haven't already done so as per Chapter 2). Determine the number of copies required and reproduce them on high quality paper. Most journals will prefer to receive the manuscript with letter quality type, although most have yet to specify that in their author guidelines. Near letter quality dot matrix output probably will work, but you will have to judge how readable it is and realize that many reviewers will be influenced by the quality of the type.

Also provide a computer disk with your manuscript saved in two formats: the original word processor format (MS Word, Wordperfect, Claris Works, etc.) and the second as an ASCII text file. This assures that the journal will be able to access your files. Place a label on the disk indicating your name, the manuscript title, format, filenames, and computer type (Mac or PC).

Save at least two additional copies of the manuscript for your files and for editing when review comments come back from the journal. Identify the name and address of the current journal editor. Prepare a letter of submission and a large envelope which will contain both the letter and the copies of the manuscript. If the manuscript is to be refereed, ask the editor to have it reviewed as a

refereed article. Otherwise, s/he could determine whether or not to place the article under other categories of articles within the journal, such as general information items.

Sample Letter:

Your institution's letterhead and your return address should be on the letter. The letter's text could look something like the following:

June 5, 1996

Dr. Mark Sanders, Editor
The Journal of Technology Education
Virginia Polytechnic Institute and State University
Blacksburg, VA 24061

Dear Dr. Sanders:

Please place the enclosed manuscript, entitled "_____" under review for inclusion in *The Journal of Technology Education* as a refereed article. I would appreciate confirmation of the status of the article and an indication of your publication schedule. Please inform me if any further information or revisions are needed to facilitate successful publication of this manuscript.

Your time and consideration of this request are appreciated.

Sincerely,

Full Name, Title
Rank

NOTE: Have available a current black and white head and shoulders photograph available, should one be requested at the time of submitting the manuscript or upon its acceptance.

The Review Process

Once the editor receives your letter and manuscript copies, s/he reads the article, determines if it is within the general scope of that journal, and also decides whether or not to honor your request for a peer review of the article. Usually the review process proceeds; it is an unusual case which causes the article to be sent back to the author without the review actually taking place. Totally inappropriate topics or articles which do not meet the general guidelines of the journal are likely candidates for such action. Since this doesn't happen very often, you should receive from the editor a letter of confirmation which will indicate that s/he has received your manuscript and has placed it under review.

The Editorial Review Board of the journal is usually comprised of professionals from around the country (or the world) who serve in a variety of professional positions and can provide a broad spectrum of views. These people have been selected by the professional association or the journal's governing body to review, prior to publication, the content of the journal and assure that it meets the standards and image desired. Most refereed journals provide a listing of those people who review for the journal and state where they are employed.

Once the editor determines that your manuscript qualifies for the review process, s/he selects from the Editorial Review Board those persons who will review the manuscript. Editors never select those people who are at the same institution as the author. The process is, for the most part, a "blind" review. In other words, your name and institution have been removed from the top of the manuscript prior to sending it to the reviewers. Typically, the editor will know their reviewers and the types of things s/he usually looks for and will try to balance the review across a variety of individuals, depending upon the content or topic of the article.

The reviewers receive one copy of your manuscript and often a form or forms which need to be completed. The Journal of Industrial Teacher Education, for example, uses two forms which allow the reviewer to provide feedback to the author (see Appendix D). One form is used when the article is rejected and provides feedback as to why the reviewer believes that the article should not be published in the journal. The other form is for revisions (major and minor) which the author needs to attend to prior to resubmitting the manu-script for publication. This is very helpful to the author, as these comments will provide direction for the successful revision of the article.

Usually the review process takes two to three months, depending on the number of articles which are sent to that journal on a regular basis. The editor will receive all comments back from the reviewers and summarize them for the author. The editor will determine the final status of the manuscript and send a letter indicating whether or not the manuscript was accepted, accepted with revisions, or rejected. If the article was accepted without revisions, the editor will indicate when the article will be published and what further information s/he needs from you as an author. If the article was accepted with minor or major revisions, s/he will provide the reviewers' comments or suggestions on how the article should be revised, and often s/he will include a deadline for resubmitting the revised materials, especially if only minor revisions are required and there is a forthcoming publication date.

If your article was rejected, the editor will usually explain why and offer suggestions. If you have further questions, you should not hesitate to contact the editor and inquire about the manuscript. Remember that they are under no obligation to print your article, and you may have sent the manuscript to the wrong journal for the particular content/topic. Don't hesitate to revise the article and send it to another journal for consideration.

Resubmit your revised article as soon as possible after you receive the results of your review! *The Technology Teacher* reported that 35% of all articles are accepted and 27% are rejected. According to the *Journal of Industrial Teacher Education*, 30% of the articles published were accepted after revisions. Those authors who are asked to revise their manuscript and resubmit seldom actually make the needed corrections, even those which are minor revisions.

Prepare to Revise and Resubmit

Manuscripts are returned to writers in several categories. They may be accepted, rejected, accepted with major revisions, or accepted with minor revisions. The latter is, of course, the kindest, and the easiest to deal with. You just have to make the minor revisions that are requested, return the manuscript, and add the published article to your resume! However, the other two are more trouble because when something is returned with

"rejected" written on it, damage is done to your ego. There is a strong temptation to throw the paper into a drawer. But, that is exactly what you should NOT do. You should immediately revise the manuscript and resubmit it, perhaps to an alternate journal. The following are suggestions for dealing with the two most damaging kinds of rejections.

Rejected with Invited Resubmission

A rejected manuscript with the invitation to resubmit is not really so bad. The review process has found significant merit in your work, and the reviewers want to see it again. Therefore, it should be redone and sent off right away. The reviewers' comments can be a big help here and, if used properly, can make an average article a very good one. Study them carefully to see if they can be turned around to your advantage. In one case, a particular reviewer went to great lengths to castigate an article for its manifold weaknesses and wrote a twelve-page response describing ideas that should be added, references that should be cited, and points that should be made. The author used those comments and citations in a revision of the article, sent it back in, and it was thereupon accepted with no further comment.

Completely Rejected

This is the toughest kind of rejection to face, and it does more damage to self-esteem than any other rejection. Probably more "rejected" manuscripts line the bottoms of drawers and file cabinets than we realize. But there are still positive options.

One good option is to take a close look at the article -its form, content, style, technical accuracy - and compare it with the reviewers' comments. Perhaps it was rejected for good, but repairable reasons, and should be revised and sent back. Or, perhaps it should then be sent to another journal that would consider it a more suitable article. If the subject was not appropriate for the publication to which it was originally sent, it might be welcomed elsewhere after changes are made to repair substantive problems.

The other option is to send it unchanged to another journal for review. This is a courageous action, but one that is justified if you truly believe that you have a meritorious manuscript just as it is. Remember that there is a notable lack of interrater reliability between review teams, and the same article that received bad reviews from one source might receive equally good reviews from another. A case in point is the manuscript that was rejected in very strong terms by one journal. Because the author thought the piece was worthwhile, it was sent unchanged to another, more prestigious journal. The second journal not only accepted the article, but considered it for the journal's conceptual manuscript of the year award! So, don't be afraid to "market" your manuscript if you think you've got a good one.

Celebrate Acceptance and Publication

When an article has been accepted, you will receive a letter from the editor informing you of the date of publication. Most journals will furnish you with additional copies of the issue that contains your article. Many authors request reprints so they can send them to people they know will have a special interest in the topic. And, of course, you must put a copy in your personnel file!

Celebrate this achievement! It is not enough to take care of the need for personal recognition alone. Departmental recognition is also important. So be sure to have the news of your success appear in departmental, college and/or university newsletters and, just as important, report your success to the proper administrators. Add this achievement to your resume.

Above all continue to write!! Look for opportunities to follow-up with the topic published. Look for alternative manuscripts to prepare which relate to the topic or that target a different audience. Be productive with your time and prepare a regular schedule to keep writing, submitting, and thus gaining a regular record of scholarship.

References and Resources

Style Guide

American Psychological Association. (1994). *Publication Manual of the American Psychological Association* (4th ed.) Washington, DC: Author.

References

Lee, M. (1990). *The handbook of technical writing: Form and style.* San Diego, CA: Harcourt, Brace, & Jovanovich.

Kirkman, A. J. (1992). *Good style: Writing for science and technology* (1st ed.). NY: E. & F. N. Spon.

Rubens. P. (Ed.) (1994). *Science and technical writing: A manual of style.* NY: H. Holt.

Young, M. (1989). *The technical writer's handbook: Writing with style and clarity.* Mill Valley, CA: University Science Books.

Walvoord, B. E. (1988). *Three steps to revising your writing for style, grammar, punctuation, and spelling.* Glenview, IL: Scott Foresman.

Internet Address

The Purdue University On-line Writing Lab   http://owl.trc.purdue.edu/

Appendix A

Journals Appropriate to Technology Education

The following listing of journals and magazines serve the broad spectrum of areas related to technology education. While this list is not exhaustive of the journals which are well suited to the field, they do reflect the places faculty are more likely to submit manuscripts for publication. Please add to this list the journals in your speciality area(s). Indicated in parentheses is the sponsoring association's acronym. **Bold** is used to indicate those journals/magazines which are most specific to **technology education.**

Abstract Bulletin (IPC)
American Educational Research Journal (AERA)
American Educator (AFT)
American heritage of Invention and Technology
American Laboratory
American Photographer
American Printer
American Psychologist (APA)
American Scientist (SRS)
American Statistical Association Bulletin (ASA)
Artificial Intelligence
Black Scholar
Bulletin of Science, Technology, and Society (NASTS)
Chemical Engineering
Chemical & Engineering News (ACS)
The Chronicle of Higher Education
Communication Arts
Communication Technology Impact
Communication World (IABC)
Community College Journal (AACC)
Computer Graphics World
Computerworld
Darkroom Photography
Darkroom Techniques
Design Graphics World
Developmental Psychology
Educational and Psychological Measurement
Educational Evaluation and Policy Analysis
The Educational Forum (KDP)
Educational Leadership (ASCD)
Educational Planning
Educational Record (ACE)
Electronic Printing and Publishing
Energy Insider
Energy Sources
The Futurist (WFS)
Graphic Arts Monthly
Graphic Communications Education
Graphic Communications World
High Technology
Human Organization
Human Resources Quarterly

IEEE Transactions on Computers
Industrial Engineering (AIIE)
Instructional Innovator (AECT)
Interfaces (IMS & ORSA)
International Laboratory
Inter-Society Council News
Issues in Science and Technology (NAS, NAE, IM)
Journal for Vocational Special Needs Education
Journal of Applied Psychology
Journal of Applied Behavior Analysis
Journal of Black Studies
Journal of Career Education
Journal of Counseling Psychology
Journal of Educational Measurement
Journal of Educational Thought
Journal of Education Research
Journal of Engineering for Industry
Journal of European Industrial Training
Journal of General Management
Journal of Industrial Teacher Education (NAITTE)
Journal of Industrial Technology (NAIT)
Journal of Information and Image Management (IIMA)
Journal of Management
Journal of Manufacturing Systems
Journal of Occupational Psychology
Journal of Personality
Journal of Personality and Social Psychology
Journal of Quality Technology
Journal of Secondary Education
Journal of Technical and Vocational Education
Journal of Technology Education (ITEA)
Journal of Technology Studies (EPT)
Journal of Technology Transfer
Journal of Teacher Education
Journal of Vocational Behavior
Junior College Journal
Kappa Delta Pi Record (KDP)
National Science Foundation Bulletin (NSF)
New and Emerging Technology
Performance and Instruction (NSPI)

Performance Improvement Quarterly (NSPI)
Personnel and Guidance Journal
Phi Delta KAPPAN (PDK)
Physics Today (AIP)
Prepress Bulletin (IPA)
Pro-Education
Psychological Bulletin
Psychological Statistics
Publish
Publishers Weekly
Quality Progress
Quality Management Journal (ASQC)
Research and Development
Research Bulletin
Research Management
Review of Educational Research
Review of Physical Chemistry
Robotics Age
Science (AAAS)
Science News
Scientific American
Solar Today (ASES)
Tech Directions
Technology and Culture (SHOT)
Technology Review
Technology Today
Technometrics
TEST
The Teaching Professor
The Technology Teacher (ITEA)
T.H.E. Journal
Training and Development (ASTD)
TIES
Training
Training World
Visual Communications Journal (IGAEA)
Vocational Guidance Quarterly
VOCED Journal (AVA)
World Watch

Appendix B

Sample Author Guidelines
From Journals/Magazines in Technology Education

Issues in Science and Technology
The Journal of Industrial Teacher Education
The Journal of Technological Studies
Journal of Technology Education
The Technology Teacher
TIES

VOLUME XII   NUMBER 3
SPRING 1996

ISSUES

IN SCIENCE AND TECHNOLOGY

ISSUES IN SCIENCE AND TECHNOLOGY *is published to inform public opinion and to raise the quality of private and public decisionmaking by providing a forum for discussion and debate. Accordingly, the pages of* ISSUES IN SCIENCE AND TECHNOLOGY *are open to all responsible points of view, and the material published here reflects only the views of the authors, not the policy of any institution.*

The sponsors of ISSUES IN SCIENCE AND TECHNOLOGY *are the National Academy of Sciences and the Cecil and Ida Green Center for the Study of Science and Society at the University of Texas at Dallas.*

ISSUES

IN SCIENCE AND TECHNOLOGY

AUTHOR GUIDELINES

Issues in Science and Technology is the quarterly policy journal of the National Academy of Sciences and the Cecil and Ida Green Center for the Study of Science and Society at the University of Texas at Dallas. We publish articles that analyze current topics in science, technology, and health policy and recommend actions by government, industry, academia, and individuals to solve pressing problems. The pages of *Issues* are open to anyone who can write an informed, well reasoned, and policy-relevant article. We publish feature articles of 4,000 to 5,000 words and "perspectives" of 2,000 to 2,500 words.

Proposals

Although we accept submissions of completed manuscripts, we prefer that authors begin by submitting a 2-3 page outline or proposal that explains the problem or issue to be discussed, sketches the structure of the analysis, and provides as much detail as possible about the conclusions and recommendations—specifying who should do what. We will call you to discuss the outline so that you will have some feedback before preparing a draft manuscript.

Manuscript Submission

Manuscript can be mailed to   Kevin Finneran
                                         2805 35th Street, N.W.
                                         Washington, D.C. 20007
sent by fax to   (202) 965-5649
or sent via the Internet   kfinnera@nas.edu

We do not use footnotes, but we do request a list of 5-10 articles or books for "recommended reading."

After an article has been accepted, we would like to have:
         1) A double-spaced hard copy of the manuscript.
         2) A copy of the manuscript on a computer disk—3 1/2-inch hard disks. We prefer an ASCII, Word, or WordPerfect format, but are able to convert files from many word processing programs.
         3) Artwork, when appropriate (tables, charts, graphs). Not all articles will need art, but many could benefit from it. We can redo tables, charts, and graphs to conform to our style.

Copies and Reprints

Issues will send each author five copies of the magazine containing his/her article when it is printed. Reprints of articles can be produced at a modest cost; we will send you a price list and ordering information.

Honoraria

Issues offers an honorarium of $500 per feature (split between authors if there is more than one) and $250 per "perspectives" piece. Unfortunately, we are not allowed to pay honoraria to federal employees or to staff of the NAS/NAE/IOM. Please let us know if you are employed by the federal government or any other organization that does not permit the payment of honoraria to its employees.

http://www.utdallas.edu/research/issues/

Information for Authors

The *Journal of Industrial Teacher Education* is issued four times annually by the National Association of Industrial and Technical Teacher Educators. Published manuscripts are high-quality guest articles, refereed articles, "At Issue" essays, "Comments," reviews of books/media and computer hardware and software in an "Under Review" section, and special feature issues that report scholarly inquiry and commentary broadly related to industrial and technical teacher education, military training, and industrial training. A "Journal Feedback" section also reports results of evaluations of the *Journal*.

Submission Requirements

All manuscripts submitted for publication must be accompanied by a cover letter that specifies the section of the *Journal* for which the manuscript is intended and an abstract that describes the essence of the manuscript in 150 words or less. Manuscripts must conform to guidelines provided in the *Publication Manual of the American Psychological Association* (1994, 4th edition) except as mentioned here. Figures and line drawings must be submitted in camera-ready form. If possible place figures, line drawings, and tables where desired in the text instead of using the *APA*'s "place table here" place holder.

Manuscripts should be submitted on a *3.5" microcomputer diskette* and in *letter-quality hard copy form*. Please be sure to provide seven hard copies for refereed manuscripts and three hard copies for "At Issue" and "Comments" articles. The preferred format is Macintosh using Microsoft Word. If an MSDOS computer is used, again, Microsoft Word is the preferred word processor; although WordPerfect is acceptable. It is also helpful to include a copy saved in "text" format. *The name of the word processing program used must be indicated in the cover letter.*

Please label the disk with the author names, article title, and date of submission. The files on the disk should be clearly named. Do not submit double density disks formatted as high density disks!

The submission procedures are intended to facilitate editing and producing the *Journal*. They should not be interpreted as precluding authors without microcomputer capabilities from submitting manuscripts for publication consideration. Authors unable to meet word processing specifications should contact the Editor.

Submission
Submit refereed manuscripts (diskette plus seven hard copies) and "At Issue" and "Comments" articles (diskette plus three hard copies) to:

Rodney L. Custer, Associate Editor
Journal of Industrial Teacher Education
University of Missouri-Columbia
105 London Hall
6th & Stewart Streets
Columbia, MO 65211
Phone: (314) 882-2782
e-mail: pavtrod@showme.missouri.edu

General inquiries about editorial policies of the *Journal*, proposals for special feature issues, and recommendations for topics and authors of guest articles should be sent to the Editor. Also, evaluative information about the *Journal*, such as comments from readers and authors that can be used to assist the editors in improving the *Journal*, should be forwarded to the Editor.

Submit book/media reviews and computer hardware and software reviews (diskette plus three hard copies) as well as nominations for potential reviewers to:

Rodney L. Custer, Associate Editor
Journal of Industrial Teacher Education
University of Missouri-Columbia
105 London Hall
6th & Stewart Streets
Columbia, MO 65211
Phone: (314) 882-2782
e-mail: pavtrod@showme.missouri.edu

Manuscripts that do not meet submission requirements will be delayed in being reviewed since they will be returned outright to the author. Manuscripts must be the original work of the authors and *not* have been published, be awaiting publication, or be under publication consideration by another source.

Editing

The *Journal of Industrial Teacher Education* reserves the right to make editorial changes on all manuscripts to improve clarity, conform to style, correct grammar, and fit available space. Detailed information on the *Journal's* editorial policy and guidelines is presented in the *Journal of Industrial Teacher Education Author's Guide* by Patrick W. Miller and Thomas E. Proctor. Copies can obtained by contacting:

Gregory C. Petty
Department of Technological & Adult Education
402 Claxton Addition
The University of Tennessee
Knoxville, TN 37996-3400
Phone: (615) 974-2574

GUIDELINES FOR AUTHORS
THE JOURNAL OF TECHNOLOGY STUDIES

The guidelines for preparing manuscripts for *The Journal of Technology Studies* reflect the commitment and interest of the Board of Editors to assist authors in developing their manuscripts (m/s) to meet the standards of excellence that have been established for *The Journal of Technology Studies*. To fulfill the objective of providing an open forum and exchange of relevant ideas, members of the Honorary and non-member friends in the technology professions are invited to share their ideas through submissions.

Interested authors may be guided by the Honorary's purposes which are to:

• promote the values and contributions of professionals in technology,
• provide a medium for the professional development and recognition of individual members for leadership and achievement,
• enhance the status of the practitioners and the professions in Technology,
• foster and encourage the acceptance among its members of the ideals of technical competence, social proficiency and research,
• advance understanding, appreciation and awareness of technology as both an enduring and influential human endeavor and an integral element of culture.

These undergird the Honorary's mission of leadership and leadership development in the professions in technology. Topics should contribute to the fulfillment of this mission and be consistent with one or more of these.

1. General Requirements
The Board of Editors of *The Journal of Technology Studies* is prepared to work with authors in preparing their m/s for publication. However, any m/s submitted must:

1.1 be prepared using a word processing program (preference to Macintosh compatible programs, however other PC compatible programs will be accepted). Submit a 3 1/2" disk along with three hard copies double spaced. These items are non-returnable. If author wishes, additional copies may be submitted for return provided a stamped self-addressed envelope is included for the purpose.

1.2 represent professional level scholarly writing. Previous issues of the Journal should be reviewed to ascertain the Journal's standards.

1.3 conform to the standards of form and style as specified in the Publication Manual, 4th Edition, 1994 of the American Psychological Association (APA).

1.4 not have been published in any form prior to scheduled publication in *The Journal of Technology Studies*. If m/s is under consideration by another publication this fact must be clearly communicated to the editor of *The Journal of Technology Studies*.

1.5 cover the topic adequately within approximately 15-25 pages, double spaced.

1.6 be organized properly and if included, figures, tables, photos, or art work must be of acceptable quality for repro-

duction and printing and meet the above mentioned APA standards.

2. The Referee Process
Acknowledgement of receipt of m/s and a preliminary editorial assessment is made and shared with authors within a month of receipt. Every attempt is made to inform authors of the decision of the referees within 4 months. In addition:

2.1 the editor and at least 2 referees evaluate the m/s against criteria. Referees usually invite colleagues with special expertise to augment the referee process for any particular m/s.

2.2 if there is a disagreement between the assigned referees the editor will forward the m/s to additional referees.

2.3 the editor and referees make an initial assessment of m/s topic and:

2.31 if the topic is not appropriate, the m/s is rejected.

2.32 if the topic is appropriate, other criteria (form, style, research design and reporting, etc.) are applied. If the m/s proves satisfactory on these points, it is accepted if elements of 2.33 do not apply.

2.33 if topic is appropriate, but requires other, major changes or revisions, authors are advised to bring m/s in conformance with criteria. Usually a commitment to accept the m/s for publication is not made at this time.

2.4 the revised m/s - if major changes are made in response to editor's and referees' suggestions - should be resubmitted following directions in 1.1 at which time it will be entered into the review process like a new submission.

2.5 when m/s is accepted, author is advised of publication commitment and is requested to provide a personal 2" x 3" or 5" x 7" formal portrait and assurances as in 1.4 (even at this stage, authors may be requested to make or accept changes).

3. The Publication Process
The publication process consists of the following:

3.1 the authors are notified of m/s acceptance and a publication date is established;

3.2 the article is composed for publication based on referee and copy editor input and is sent to authors for proofreading and acceptance;

3.3 upon return of author's work, corrections are made and article is finalized;

3.4 the issue is assembled, receives a final review, and is printed and circulated.

In all processes, the Editor of Publications of *The Journal of Technology Studies* will be the final arbiter should any professional disagreement arise. Authors are assured that the Editor will approach this responsibility in an objective and professional manner.

Revised 11/94

Miscellany

Scope of the JTE

The *Journal of Technology Education* provides a forum for scholarly discussion on topics relating to technology education. Manuscripts should focus on technology education research, philosophy, and theory. In addition, the *Journal* publishes book reviews, editorials, guest articles, comprehensive literature reviews, and reactions to previously published articles.

Editorial/Review Process

Manuscripts that appear in the *Articles* section have been subjected to a blind review by three or more members of the Editorial Board. This process generally takes from six to eight weeks, at which time authors are promptly notified of the status of their manuscript. Book reviews, editorials, and reactions are reviewed by the Editor and Associate Editor, which generally takes about two weeks.

Manuscript Submission Guidelines

1. Five copies of each manuscript *and an electronic version on floppy disk* should be submitted to: Mark Sanders, JTE Editor, 144 Smyth Hall, Virginia Tech, Blacksburg, VA 24061-0432 (703)231-8173. Overseas submissions may be submitted electronically via the Internet (to msanders@vt.edu) to expedite the review process, but if submitted only in ASCII format (e.g. as an email message), a fully formatted version on floppy disk must also be sent via conventional mail.

2. All manuscripts must be double-spaced and must adhere strictly to the guidelines published in *Publication Guidelines of the American Psychological Association* (4th Edition).

3. Manuscripts that are accepted for publication must be resubmitted (following any necessary revisions) both in hard copy and on a floppy disk saved in the native word processor format (such as MS Word) *and* in ASCII format.

4. Manuscripts for articles should generally be 15-20 pages (22,000-36,000 characters in length, with 36,000 characters an absolute maximum). Book reviews, editorials, and reactions should be approximately four to eight manuscript pages (approx. 6,000-12,000 characters).

5. All figures and artwork must be scaled to fit on the JTE pages and be submitted both in camera-ready and electronic formats.

Journal of Technology Education

Subscription Information

The *Journal of Technology Education* is published twice annually (Fall and Spring issues). New and renewing subscribers should copy and mail the form below:

Name (please print) _____

Mailing Address (please print)_____

_____

Email address: _____ Fax: _____

❏ New Subscription   ❏ Renewal Subscription

Make checks payable to: *Journal of Technology Education*. All checks *must* list a US bank on the check.
    Regular (USA): $8
    Regular (Canada/Overseas): $12
    Library (USA): $15
    Library (Canada/Overseas): $18

Return check and this form to:
    Mark Sanders, JTE Editor
    144 Smyth Hall
    Virginia Tech
    Blacksburg, VA 24061-0432

JTE Co-Sponsors & Membership Information

The International Technology Education Association (ITEA) is a non-profit educational association concerned with advancing technological literacy. The Association functions at many levels—from international to local—in responding to member concerns. The Council on Technology Teacher Education (CTTE), affiliated with the ITEA, is concerned primarily with technology teacher education issues and activities. For membership information, contact: ITEA, 1914 Association Drive, Reston, VA 22091 (703)860-2100.

Electronic Access to the JTE

All issues of the *Journal of Technology Education* may be accessed on the World Wide Web at the following URL:
http://scholar.lib.vt.edu/ejournals/JTE/jte.html (Note: the URL *is* case sensitive).

The Technology Teacher

G U I D E L I N E S   F O R   S U B M I T T I N G   A R T I C L E S

The Technology Teacher is a journal for Technology Education. Readers range from elementary teachers to junior high, middle, and high school classroom teachers as well as teacher educators. The primary goal of the journal is to be a useful and interesting tool for Technology Education professionals. We are interested in both classroom teachers and teacher educators communicating their ideas. Any contributions to this goal are welcome. The Editorial Review Board uses the following criteria in deciding whether to accept or reject a manuscript.

Who Should Publish
Classroom teachers
Supervisors
Teacher Educators

Why You Should Publish
The main purpose of ITEA's publishing program is to allow you to share ideas with other Technology teachers. Publishing in *TTT* is a way to make significant contributions to education. In addition, teachers frequently mention the PR benefits of publication for their students, school, and community.

Deciding What To Submit To The Technology Teacher
- Short and practical items are in greatest demand.
- Not all ideas need to be original, but the topic and techniques should be treated from your perspective. Certain themes need to be addressed every few years.
- Each manuscript should include the importance of the ideas to the classroom setting.
- Articles, information, and ideas should be interesting and useful to classroom teachers. Student-ready worksheets and activity descriptions are popular.
- For classroom activities, be sure to include the following information: Your practical experience with the activity in the classroom, how often you have used the activity, for what grade level it is appropriate Techniques for managing the activity, and Assessment procedures utilized

Manuscripts
Maximum length for manuscripts is 2,000 words—about 8 typewritten, double-spaced pages. This guideline must be strictly observed. We prefer short concise articles. Submit only unpublished original manuscripts. Titles—eight word maximum.

To Accompany Your Article
- Tables, graphs, and charts should be appropriately labeled.
- Artwork and pictures must be included. We encourage you to submit an idea for appropriate artwork to accompany your submission if artwork is not available.
- Photographs are particularly valuable. Black-and-white prints are best. Photos should show apparatus, students at work, or other illustrative features. All photos must have signed releases for identifiable parties.

References
All sources must be referenced. Please attach a reference list (in alphabetical order) at the end of your article. References must follow *The Technology Teacher* style. For more guidelines in preparing references, see the *Publication Manual of the American Psychological Association*, Fourth Edition (1994).

What About Copyrights?
Your work is protected by copyright laws. ITEA will hold the copyright to your article in order to facilitate reprinting and republishing in the future. If you wish to have your article printed elsewhere, you need to secure permission from ITEA and include a credit line on the first page of the article.

What Happens To Your Manuscript?
When you send an item for publication, you will first receive a letter of acknowledgement from the chairman of the Editorial Review Board. Articles are sent to at least three reviewers and feedback from the review process takes six to eight weeks. Articles accepted for publication will normally appear within one year of the acceptance date.

If your article is accepted, you will receive proofs of the manuscript prior to publication. When your article is published, you will receive two complimentary copies of that issue of *TTT*.

When Submitting Your Manuscript
- Please print out your manuscript double spaced.
- Please send five copies.
- Send one copy on disc, with software indicated.
- Label all parts with your name and address, including photos and illustrations. Include both school and home addresses; phone and fax numbers.
- Send your manuscript to *The Technology Teacher*, International Technology Education Association, 1914 Association Drive, Reston, VA 22091; 703-860-2100; FAX: 703-860-0353. ✦

CONTENTS OF *TIES*

TIES has two categories of articles, departments and features, as listed and explained below.

Features (2000 words, approximately, w/color or black & white prints, or slides)

TIES features deal with topics of interest to teachers and students of technology and related subjects. *TIES'* definition of technology education assumes the following values:

- ☞ A design and problem-solving approach to classroom activity;
- ☞ Real world or student-based problems;
- ☞ Hands-on learning using tools and materials;
- ☞ Development of higher order thinking skills;
- ☞ The value of transferable models in helping students construct an understanding of the technological world
- ☞ The nature of resources and their role in designing technological solutions;
- ☞ Technology as the extension of human capabilities;
- ☞ Technology as a means of achieving human needs and wants;
- ☞ Personal, social and environmental impacts of technology;
- ☞ Historical development and cultural context of technology;
- ☞ Integrating nature of technology education;
- ☞ Abstract learning made concrete through application.
- ☞ Development of technological capability;
- ☞ The interdependence of materials, energy, control and communication, with human beings and their tools and machines in any technological event:
- ☞ The systematic nature of technological activities and products, characterized by inputs, processes, outputs, and feedback;

Articles used as features in *TIES* take many forms. They may consist of an explanation of a product, system, technique, strategy or situation; an essay discussing a theory, pointing out relationships, or documenting an activity; or a historical perspective or projection of a possible future situation.

Because technology pervades virtually all of modern life, many contexts for the technological subject under discussion will be appropriate (industry, the arts, the home, recreation, the social sciences, medicine, agriculture), within the boundaries of editorial discretion. The subject may be technological or educational, but should be related to education and be clearly useful to teachers.

TIES Magazine
The Magazine of Design & Technology Education

🐾🐾🐾🐾🐾🐾🐾🐾🐾
Editorial Guidelines for Authors
May 1, 1995

TIES Magazine is a non-profit publication for middle school to high school teachers who are interested in helping to prepare students to live and work successfully in an increasingly complex technological society. Founded in 1988 at Drexel University, today *TIES* is a joint publication of Trenton State College and Drexel. Our circulation of roughly 43,000 teachers nationwide represents a variety of disciplines, although the vast majority of subscribers are technology teachers. Because technology is approached as a broad, integrating subject, teachers of virtually any subject will find articles to interest them. Therefore we welcome submissions from any authors interested in addressing their disciplines from a technological perspective.

STYLE

We are often asked what style guide we suggest for our writers. Although we do not specialize in research-oriented articles, we refer to the APA Journal as a guide when questions of style arise. For easy reading, we encourage authors to use reference lists at the end of their articles, if necessary, rather than footnotes. We also encourage writers to provide short bibliographies for possible publication. This is a great help to teachers who want to dig into the subject more deeply.

The language of *TIES* avoids the "scholarly" in favor of a clear and straightforward presentation. While we primarily address teachers, we are happy that much of what we print is also used directly by students.

As a matter of policy, we avoid the masculine pronoun when generalizing, using plural rather than single constructions (they rather than he or he/she) or the second person when the problem arises. We do not use the term "man" as a collective term, with preference going to "people," "human beings" or "individuals."

Visual Presentation

We are dedicated to using as visual an approach as possible. *TIES* is published in four-colors, and our readers report that photographs, drawings and paintings, diagrams, cartoons, charts and graphs add to both the usability and the perceived quality of our magazine. We encourage you to include originals of artwork with your manuscript and to acquire permission to reprint that artwork in writing. If you are unsure how to go about this, call us.

Departments (1000-1200 words)

TIES to a BROADER NETWORK
— an invited editorial by a recognized leader in a field related to technology, but usually outside of education. This department provides a forum for the author to share his or her vision of the relationship of technology to society, the economy or education, or any other appropriate topic. Topics under discussion are usually related to a feature article in the current issue.

INTERFACE
— an informational article about technology as it relates to a subject not normally perceived as technological or infrequently discussed in technological terms. INTERFACE has included articles on video animation, musical instruments, dance, theater, marketing, air traffic control, audio animatronics, mathematical sculpture, etc..

TECHNOSPHERE
— an article which deals with technology and technology education around the world. Subjects have ranged from appropriate technology (pedal-powered vehicles in China and impacts of technology transfer in India), to high-tech achievements abroad (the Channel Tunnel), to co-operative educational activities among the US, Japan, USSR, Canada and Europe.

TIES to TEACHING
— an opportunity for educators to share their experience and opinions concerning an aspect of technology education. Subjects have included interdisciplinary activities, contexts for problem-solving activities, the portfolio, biotechnology, etc.

YOUNG INVENTORS (ENTREPRENEURS, DESIGNERS, EXPLORERS)
— an article spotlighting the achievements of student technologists across the country and around the world.

PERSPECTIVE
— a short article expressing opinions or insights of educators and non-educators about issues relating to technology education. Issues have included the nature of design, the goals of TIES, and "technology" as a turning point in education.

PATENTS AND INNOVATIONS
— an article related to current or historical inventions and innovations. Subjects have ranged from a review of inventions to advice for inventors from patent specialists to a narration of a patent models exhibit.

TIME MACHINE
— an article about technology, design or invention related to a historic or speculative future context, or to the evolution of a device or system. Subjects have ranged from Morse's telegraph to the history of photography to past and future innovations in transportation.

EcoTIES
— an article relating technology to environmental issues, with emphasis on suggestions for engaging students with the issue in the classroom.

PROFILE
— a short article spotlighting an outstanding personality: a teacher, student, technologist or other community member whose unique story provides a stimulating role model.

The following four departments are offered as a service to our readers. Items for inclusion in these departments are solicited from the field.

DATABASE
— review of new books and other educational media for use by technology educators. (Black and white photo of cover plus review copy needed.)

RESOURCE CENTER and MULTIMEDIA & SOFTWARE
— a review of new products of interest to technology teachers and their students. (Black and white or color photo, slide; or separations no larger than 2"x2" needed, plus descriptive paragraph.)

SCAN
—a calendar of up coming events of interest to teachers of technology, design, science and related subjects. (Title of event, sponsor, date, location, contact person and telephone number needed.)

NEWS FROM THE FIELD
— a review of breakthroughs and achievements that are interesting to students, current, and good conversation-starters for the classroom.

ORGANIZATION OF ARTICLES

1. **Title,** catchy;

2. **Subheading,** elaborating on title or explaining subject;

3. **Byline,** without honorifics;

4. **Author data,** one line explaining who the author is;

5. **Introduction** of 50-75 words which puts the article in context or explain its significance to the reader;

6. **Body of the article,** which should be organized into major topics and sub-topics; Major topics will be preceded by a major heading, sub-topics by a sub-heading, with no limit to the number of paragraphs within a topic section.

7. **Summary/conclusion,** one paragraph

8. **Design briefs,** either several short design challenges or one longer or more elaborate challenge. A design brief should include a short problem/situation statement, a challenge to action (e.g.: "Design a product which will..." Develop a solution for...", "Model a..." ,"Can you discover, assemble, construct, depict...?") which is somewhat to entirely open-ended.

PROCEDURE FOR SUBMISSION OF ARTICLES

1. Call us and discuss your potential article. We plan our editorial calendar up to 18 months in advance, and in the interest of balance, may not be able to accommodate all topics. If this is the case, we may be able to steer you to another publication.

2. If we agree that a topic is timely and appropriate, we'll tell you about our deadlines and ask you to submit a short outline of the article you'd like to write. We'll also stress the need to follow our guidelines.

3. We'll work with you to meet deadlines, help with editing and acquisition of illustrations, in an attempt to publish your article as scheduled. We must reserve the right to change schedules if circumstances require it.

4. Unsolicited articles are reviewed by the *TIES* editorial staff. If necessary they are sent out for review to subject experts. Juried articles are printed from time to time in *TIES*, after approval from our Editorial Advisory Committee.

Appendix C

Style and Format Guidelines
Abstracted from the
Publication Manual of the American Psychological Association
(APA)

General Format:

- **Title page** with title of manuscript, author's name, rank or title, department, and institution (numbered as page 1 at bottom of page in the center).
- **Abstract** is a separate page, numbered as page 2 in the upper right hand corner.
- **Text** start on a new page, numbered as page 3 (and so forth) in the upper right hand corner. Include introduction, body of document, and summary/conclusions.
- **References** start on a new page following the text of the manuscript but before any Appendices.
- **Appendices** label each such as with the Appendix A and a title indicative of the contents of the appendix as referenced in the text.

Observe the APA format for margins, page numbering and placement of page numbers, and other style conventions.

- Double space.
- Margins 1 1/2" on top, bottom, left and right sides.

Quotations:

- Short quotations - quotes of 40 words or fewer should be incorporated into the text and enclosed by double quotation marks (").
- Long quotations - quotations of more than 40 words should be double spaced and indented five spaces from the left margin of the text.

Note: A quote is a direct copy whereas a reference citation is getting some information from your reading and incorporating it into the paper. Each must be cited in the text and listed in the references at the end of the manuscript.

Examples of Quotations of Sources:

The following examples illustrate the application of APA style to direct quotation of a source. When quoting, always provide the author, year, and specific page citation in the text and include a complete reference in the reference list. These examples are from page 69 of the 3rd Edition of the *Publication Manual of the American Psychological Association.*

Quotation 1:

He stated, "The `placebo effect,' ... disappeared when behaviors were studied in this manner"

(Smith, 1982, p. 276), but he did not clarify which behaviors were studied.

Quotation 2:

Smith (1982) found that "the `placebo effect,' which had been verified in previous studies, disappeared when [his own and others'] behaviors were studied in this manner" (p. 276).

Quotation 3:

Smith (1982) found the following:

> The "placebo effect," which had been verified in previous studies, disappeared when behaviors were studied in this manner. Furthermore, the behaviors were never exhibited again, even when real drugs were administered. Earlier studies were clearly premature in attributing the results to a placebo effect. (p. 276)

Reference Citations in Text:

One work by a single author -
Smith (1983) compared reaction times ... **or**
In a recent study of reaction times (Smith, 1983)...

One work by two or more authors -
Williams, Jones, Smith, Bradner, and Torrington (1983) found...

Works with no author -
on free care ("Study Finds," 1982) ... the book College Bound Seniors (1979) ...

Order of References in the Reference List:

Arrange entries in alphabetical order by the surname of the first author. Only include references which were cited or quated in the text if the article. The first line of each reference is indented with the second and subsequent lines flush left. This is a new configuration which began with the Fourth Edition of the *PublicationManual of the American Psychological Association*.

Examples of References:

• Journal article, one author -

Paivio, A. (1975). Perceptual comparisons through the mind's eye. *Memory & Cognition, 3,* 636-647.

• Journal article, two authors -

Becker, L. J. , Seligman, C. (1981). Welcome to the energy crisis. *Journal of Social Issues, 37*(2), 1-7.

• Magazine article -

Gardner, H. (1981, December). Do babies sing a universal song? *Psychology Today*, pp. 70-76.

• Entire issue of a journal -

Glaser, R., & Bond, L. (Eds.). (1981). Testing: Concepts, policies, practice, and research [Special issue]. *American Psychologist, 36*(10.

• Reference to an entire book -

Bernstein, T. M. (1965). The careful writer: A modern guide to English usage. New York: Athumeum.

• Book, no author or editor -

College bound seniors. (1979). Princeton, NJ: College Board Publications.

• Electronic media -

In the case of electronic media such as computer software the following formats are used. If the software is a commercial package then the author's name is dropped as in the example below.

Snelling, E. P. (1990). My software package (Version 1.0) [Comptuer Software]. Albany, NY: Home Publishers Inc.

Pagemaker (5.0) [Computer Software]. Seattle, WA: Aldus Corporation.

Additional examples of reference formats are shown in the *Publication Manual of the American Psychological Association*. It is the wise author who has this guide along with a dictionary and thesaurus close at hand when preparing manuscripts for publicaiton.

Date Sent:_____   Return By:_____ _____

JOURNAL OF TECHNOLOGY STUDIES
Manuscript Evaluation

_____ _____
Manuscript Title

Reviewer:_____   Date Returned:_____

ANALYSIS

Comments given in each category below should identify problems, their
locations in manuscript and recommend solutions wherever possible.

1. TOPIC IS RELEVANT TO THE INTERESTS   YES   PARTLY   NO
   OF EPT AND MEMBERS OF THE SEVERAL
   PROFESSIONS IN TECHNOLOGY

Comments:_____

_____

_____

2. MATERIAL IS WELL ORGANIZED AND   YES   PARTLY   NO
   CLEARLY WRITTEN

Comments:_____

_____

_____

3. CONTENT APPEARS TO BE ACCURATE AND   YES   PARTLY   NO
   MAKES USE OF APPROPRIATE SOURCE MATERIAL

Comments:_____

_____

_____

4. TABLES/FIGURES, IF ANY, ARE   YES   PARTLY   NO
   CONSISTENT AND ADD TO UNDERSTANDING

Comments:_____

_____

_____

5. IF RESEARCH ARTICLE, METHODOLOGY IS   YES   PARTLY   NO
   CLEAR AND APPROPRIATE

Comments:_____

_____

_____

Appendix D

Sample Review Sheets from the Referee Process

Journal of Technology Studies
The Technology Teacher

6. IF RELATED TO PHILOSOPHY, LEARNING, OR   YES   PARTLY   NO
   INSTRUCTION, AN ACCEPTABLE GRASP OF
   RELEVANT DISCIPLINES AND LOGICAL
   PROCESSES IS EVIDENT

Comments:_____

_____

_____

7. IF RELATED TO A TECHNICAL SUBJECT,   YES   PARTLY   NO
   AN ACCEPTABLE GRASP OF RELEVANT
   PROCESSES AND DISCIPLINES IS EVIDENT

Comments:_____

_____

_____

8. RECOMMENDATIONS:

_____ PUBLISH WITHOUT CHANGE

_____ PUBLISH AFTER REVISION

_____ DO NOT PUBLISH

Explanation:_____

_____

_____

_____

_____

_____

_____

_____

_____

Additional Comments/Suggestion:_____

_____

_____

_____

_____

Signature:_____ Date:_____

Reviewer :

The Technology Teacher
International Technology Education Association
Manuscript Evaluation

Manuscript Number: Date Sent:

Title: _____   Return By:

Date Received by Editor _____

Analysis of Manuscript

1.   Deals with a problem, an issue, a condition,   Yes   Partially   No
       or a project that is of concern to technology educators.
       Problem and location in the manuscript:

       Recommended Solution:

2.   Is the problem, issue, condition, or project   Yes   Partially   No
       a new one or an old one approached in a new way?
       Problem and location in the manuscript:

       Recommended Solution:

3.   Are there solutions or examples offered to   Yes   Partially   No
       the problem, issue, or condition?
       Problem and location in the manuscript:

       Recommended Solution:

4.   Does it stand a carefully reasoned (logical)   Yes   Partially   No
       and complete presentation?
       Problem and location in the manuscript:

       Recommended Solution:

Evaluation of the Manuscript (check one only)

____ Publish without Change. Reason:

____ Publish After Minor Revision. Add additional suggestions for improving the manuscript.

____ Publish After Major Revision. Add additional suggestions for revising the manuscript.

____ Do Not Publish. Reasons (Please be specific):

Disposition of the Manuscript (check those that apply)

____ Should this manuscript receive priority   Yes   No
     publication scheduling?

Is this manuscript more appropriate for:

____ TTT - oriented toward the practitioner

____ JTS - oriented towards research and theory

____ Either TTT or JTS
Suggestions for improving the manuscript (add an additional page if necessary):

Previous CTTE Monographs