PITTSBURG STATE UNIVERSITY
Office of Academic Affairs
THE TENURE DOSSIER
November 5, 2004

The tenure candidate's dossier summarizes the evidence presented to substantiate the candidate's case for tenure. The dossier represents both quantitative and qualitative data concerning the candidate's total contribution to his or her own professional development, to his or her students, and to the academic community at Pittsburg State University.

There are two sections of the tenure dossier. Section A, the cover page, represents a check list of the steps through which a tenure dossier must pass as well as an outline of the actions taken on an individual's tenure candidacy. The instructions for Section A should assist in understanding these procedures and in processing tenure dossiers expeditiously. Section B, The Candidate's Section, presents a template to assist the candidate in determining the kind of information that should be presented and the format in which it should be reported.

SECTION A- The Cover Page. For each person being considered for tenure, a cover page is to be prepared (see Appendix 1).

Item 1- Enter the last name first. The tenure candidate is to sign the cover page prior to its submission to the Department Chairperson.

Item 2- Be certain to enter the complete rank and title (i.e., "Professor of Psychology" or "Assistant Professor of English," not "Professor" or "Assistant Professor"). Year in this item refers to year of appointment or promotion.

Item 3- Enter degrees earned, year awarded, and institution awarding degree.

Item 4- After the Department Tenure Committee has completed its recommendations, the "is recommended" or "is not recommended" block should be checked and the committee chairperson should sign in the appropriate place. A written justification of either support or non-support of the candidate is required. (NOTE: Library and Instructional Media committees will use this item.)

Item 5- The Department Chairperson will recommend or will not recommend the candidate by checking the appropriate square. A written justification of either support or non-support of the candidate is required. [NOTE: Since there is not a department chairperson in the Division of Learning Resources, tenure dossiers for candidates in the Division of Learning Resources will pass directly from the Tenure Committee to the Dean of Learning Resources.]

Item 6- The appropriate Dean will recommend or not recommend, check the appropriate box, sign in the appropriate place, and write a justification for the recommendation made.

Item 7- The Vice President for Academic Affairs will check the appropriate recommendation, write a justification, and sign Item 7.

Item 8- The President will check the appropriate recommendation and sign Item 8.

SECTION B - The Candidate's Section. The tenure dossier represents the primary database provided by the candidate in support of his/her candidacy for tenure. The dossier consists of both quantitative and qualitative aspects of a faculty member's experience at PSU. The candidate will determine the content of this section of the tenure dossier. The narrative portion of the dossier must be printed in font no smaller than 12-point and the narrative must be confined to no more than 20 pages, with one inch margins. Supporting documentation may then be attached as appendices. The comments below should assist candidates preparing a tenure dossier to present comprehensive data to support the tenure case.

This part of the tenure document presents the factual and quantitative data to support the tenure nomination. Qualitative support material is appropriate and will be included where relevant in the sections set aside for such data. Any changes to the dossier submitted by the candidate must be endorsed by the candidate. In the upper right-hand corner of each page, type the last name of the candidate followed by the page number (e.g., DOE 5 of 10). It must be remembered that tenure recommendations, unlike promotion recommendations, are based upon one's entire career at Pittsburg State University. With this in mind, relevant information should be included in the tenure dossier relating to the total experience of the faculty member while at PSU.

Candidates may not have entries for all of the categories that are listed here in the areas of teaching; discipline research, scholarly activity, or creative endeavor; and university and community service. Where little or no evidence exists to support contributions in a particular area, the area should not appear in the dossier. For example, if in "II. Teaching (page 3) a candidate had never served on a master degree committee (Item D) or directed a thesis (Item E) those items would be omitted and Item F, "Contribution to Course and Curriculum Development," would then be labeled "D."

For an example of a completed tenure dossier, see Appendix 2.

I. GENERAL INFORMATION

A. Credit for Prior Service

If credit toward tenure for prior service at another institution was granted upon the initial hiring, list the institution(s) at which you served , the nature of your duties (e.g., professor of history), the dates served (e.g., September, 1996- May, 1999), and the number of years of credit granted toward tenure. In an appendix, provide a copy of your initial contract with Pittsburg State University as documentation.

B. Non-University Professional Experience

Professional experience for the time spent on the PSU campus should include academic appointments and industrial, business, and governmental positions. Appropriate non-university

summer employment should also be noted in chronological order, beginning with the most recent experience.

C. Licenses, registrations and/or Certificates

Include dates and list the most recent first.

D. Citations in Biographical Works

List only title of work, edition, and date. The complete bibliographic citation is not necessary.

E. Awards and Honors

Mention here research fellowships, grants, and sabbaticals in addition to the more traditional awards and honors.Memberships in Academic, Professional, and Scholarly Societies

F. Memberships in Academic, Professional and Scholarly Societies

Do not list offices held in these societies in this section. List only the name of the society and date of membership. List most recent first. For continuing memberships indicate the initial year of membership only (e.g., 1999-).

G. Qualitative and Evaluative Comments on General Information

Comments pointing out the relevance of non-university professional experience, summer employment, license, and membership in academic, professional,, and scholarly societies should be made in this section. These remarks should be especially pertinent to professional development and mastery of subject matter.

II. Teaching

A. Courses Taught

Note all courses taught while on the PSU faculty. List courses in the manner noted below, indicating administrative or supervisory responsibilities by an asterisk on the course number. List each course number and title only once. List the most recent first.

Number Title

B. Teaching Load

List teaching load in credit hours, or converted hours if more appropriate (explain), and number of preparations since initial PSU appointment by year (or semester, if preferred).

If a reduced teaching load has been approved due to an administrative or other specialized assignment, explain the nature of the reduced assignment.

C. Teaching Assignments Away from Home Campus

List by date, course, enrollment, and location.

D. Master Degree Committee Memberships

Include information concerning the number of committees upon which you have served. Note those which you chaired.

E. Theses Directed

Indicate number of students, list thesis titles, and designate those that have been published or presented at conferences off campus with an asterisk.

F. Contribution to Course and Curriculum Development

List each significant contribution for which you have been responsible in course and/or curriculum development at PSU, and provide a brief statement describing each contribution. Also describe new instructional or innovative classroom techniques or strategies that you have developed or employed, including the uses of new technologies.

G. Preparation of Instructional Media

Textbooks, WEB based course materials, laboratory manuals, video-tapes, instructional films, tape/slide presentations, auto-tutorial modules, personalized self-instruction units, etc.

H. Experimentation and/or Research in Instructional Methods and Techniques

Briefly describe the project(s) mentioning the hypothesis being tested or the purpose of the investigation, the procedures utilized, number of students involved, and the results and outcomes of the work.

I. Institutions, Workshops, and Other Programs Attended

List here professional development activities that would contribute to teaching effectiveness and/or subject mastery. These activities should be listed, the most recent first, by title, sponsoring agency, and date.

J. Impact on Students

Any recognition received from students that would indicate your impact upon them as an instructor. Include here student evaluations, alumni feedback questionnaire results, performance

on national achievement tests (GRE, State Boards, MSAT, etc.), "pre-post measures" of your own use, involvement of undergraduate and graduate students in scholarly/creative activities, success of students in competitions and in scholarly/creative activities, etc.

K. Student Advisement

Provide data to show your advisement load each semester of the probationary period. It is proper to include the number of other students for whom you provided substantial guidance and advisement. You should include evidence of effective advisement of students on achieving academic and personal goals, including a semester by semester summary of the feedback received from students using the department's advisement survey instrument.

L. Other Evidence of Teaching Effectiveness

Note other data relevant to teaching effectiveness such as collegial evaluation, teaching awards, seminars or workshops led on teaching, etc.

M. Qualitative and Evaluative Comments on Teaching

In addition to the factual data in Items A through L, this section should carry qualitative statements intended to support some aspects of the teaching activity. Comments concerning authorship of instructional media and their quality are important.

III. RESEARCH, SCHOLARLY ACTIVITY, AND/OR CREATIVE ENDEAVOR

A. Publications (Copies of papers, monographs, and other publications may accompany this dossier if so desired by the candidate. Such materials will be returned to the candidate.)

1. Papers

Papers, research abstracts, and equivalent publications should be listed in this section. Standard bibliographic citations for the discipline should be used in listing publications. In the case of multiple authorship, the major contributing author should be indicated by an asterisk. If full joint authorship is the case, neither should carry the asterisk.

2. Monographs

Textbooks (if not noted in Section II.), anthologies, book reviews, monographs, etc. Popular magazine articles and other publications not relevant to the nominee's research, scholarly, or creative activity should be reported in Section IV. Use the form for bibliographic citations that is prescribed in Section III. A. 1.

3. Other Publications

List in appropriate bibliographical format any other publication not included in categories A. 1. or A. 2. above.

4. Works in Progress

Publications of the type noted in III. A. 1. and 3. that are in progress (in press, accepted and undergoing revision, or submitted) should be noted in this section. An indication of the status of the work should be noted for each entry.

B. Production or Exhibition of Creative Work

1. Juried or Invited Exhibitions or Performances

Indicate title, location and date of the exhibition or performance of the work produced or created. List the most recent first. Programs and exhibition brochures may be included in an appendix.

2. Other Exhibitions or Performances of Creative Work

List as in III.B.1.

3. Reviews of Creative Work

Include references or comments from critical reviews, peer reviews or other forms of adjudication that speak to the quality of created works . Copies of the complete reviews or adjudications may be included in an appendix.

C. Lectures, Papers, Creative Works Presented at Meetings or Other Educational Institutions

Such presentations at institutions, conventions, workshops, symposia, etc., should be germane to one's discipline and noted, using the following convention: title, meeting, sponsoring agency, location, date. Please list the most recent first. Presentations that are not related to one's discipline or that are presented at an organization not related to one's discipline should be placed in Section IV. C. 3.

D. Institutes, Workshops, and Other Programs Attended

List here professional development activities that contribute to research, scholarship, and/or creative endeavor. These activities should be listed the most recent first, by title, sponsoring agency, and date.

E. Scholarly Development

List here the activities in which you have been engaged that have improved your professional credentials. These could include such activities as self-study, completed coursework, earned degrees, sabbatical work, and the development of new teaching, research, performance or creative skills.

F. Research and Creative Endeavor Grants and Awards Received

Cite the grant or award received, the title of the research, the date, and any outcomes (the award of another research grant, publications, performances, exhibitions, patents, papers read, etc.).

G. Evidence of National or International Recognition

List, most recent first, the nature, source and date of the recognition. Where appropriate, provide a brief explanatory statement. Items appropriate to this category are citations of publications by other authors, service on national or international committees, invited addresses to national or international meetings, listing in national or international biographies, etc.

H. Current Research and/or Creative Endeavor Interests and Projects in Progress

List the major significant areas of research and /or creative endeavors and projects in progress. Provide brief statements summarizing the anticipated outcomes of each activity.

I. Qualitative and Evaluative Comments on Research, Scholarship and Creative Endeavors

In addition to the factual data in Items A through H, this section should provide a qualitative statement to support aspects of scholarly/creative activity. Comments concerning the value of workshops, institutes, etc., attended with respect to the discipline competence and research or creative endeavor capability of the candidate is important. Statements by colleagues and recognized authorities in the candidate's field are welcome in this section. Remarks should be germane to the research accomplished (e.g., venues of performance, critical reviews, journals in which published, co-authors, sponsoring agencies, number of citations of candidate's work, etc.).

IV. SERVICE

A. University Service

1. Conducting Educational Studies/Investigations

Indicate any special study and/or investigation that you have conducted to support educational programs, curriculum development, course needs, etc. Indicate the title, date, purpose, extent of the study and outcomes.

2. Outreach

a. Major Outreach Programs with which the Nominee has been Associated

Include here a listing of major outreach activities such as the offering of degree programs, or extended clusters or sequences of courses or workshops developed to address a particular audience or need. Indicate the nature and the degree of participation as organizer, coordinator, chairperson, etc. Indicate the number of people reached by these activities.

b. Sponsored Conferences, Workshops, etc.

List the non-credit IDL courses, workshops, short courses, conferences, and other organized non-credit educational outreach activities in which you participated. Indicate degree of participation as coordinator, chairperson, lecturer, etc., and the number of people reached by these activities.

3. Board of Regents System

List here the Board of Regents system projects and statewide committees of which you have been a participant. Please list these activities, the most recent first, by committee title, date or dates, and a brief description of the activity.

4. University-wide or College-wide

Include university-wide or college-wide activities or committees on which the candidate has served. Please list these activities, the most recent first, by committee title, date or dates, and a brief description of the activity.

5. Departmental

Include departmental activities or committees on which the candidate has served. Please list these activities, the most recent first, by committee title, date or dates, and a brief description of the activity.

6. Other University Service

List here any other university service activities at PSU not included in the above categories.

B. Professional Service

1. Offices Held in Academic, Professional, and Scholarly Societies

Memberships in such societies were listed in Section I. Only offices in these societies (at any level) should be noted here.

2. Public and/or Governmental Service Activities

List such activities as public offices, boards, committees and task forces.

3. Consulting Activities

Only consulting activities directly related to area of professional and/or scholarly expertise should be reported.

C. Community Service

It is fully recognized that a faculty member is often expected to take part in community affairs, such as service organizations, public offices, religious and charitable organizations, youth organizations, etc. These may not be directly related to his or her scholarly or professional activities but they may promote the general welfare of the community and therefore they are a valid service contribution. List these activities, most recent first, giving the name of the organization, a brief description of the nature of the activity, and the dates of service.

D. Qualitative and Evaluative Comments on Service

This section should carry evaluative comments concerning the candidate's service contributions to the University, the profession, and the community. Relevant remarks to mastery of subject matter and professional development can be made that would enhance a candidate's case. The emphasis should be upon presenting evidence of effective University citizenship. The faculty member should demonstrate that he or she contributes positively and cooperatively to assist the unit and the University to accomplish their goals and to maintain the academic integrity and viability of the institution. Additional statements to those made in IV. A. through C. detailing how such activities on the part of the candidate contribute to one's value as a faculty member are quite appropriate.

APPENDIX 1

The Cover Page

Office of Academic Affairs
Pittsburg State University

CANDIDACY FOR TENURE

Item 1 Name _____ _
(Last) (First) (Middle)

_____ _____
(Signature of Candidate) (Date)

Item 2 Present Rank _____ Year _____

Prior Rank(s) _____ Year _____

_____ Year _____

_____ Year _____

Item 3 Academic Record

Degree	Year	Institute Attended
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Item 4 **Department Tenure Committee** Date_____

The Candidate: ( ) is recommended ( ) is not recommended

Statement of justification is attached ( )

All **special conditions** listed in the candidate's contract letter have been fulfilled.

Committee Chairperson's Signature _____

Item 5 **Department Chairperson** Date _____

The Candidate: ( ) is recommended ( ) is not recommended

Statement of justification is attached ( )

All **special conditions** listed in the candidate's contract letter have been fulfilled.

Department Chairperson's Signature _____

Item 6 **Dean's Recommendation** Date_____

The Candidate: ( ) is recommended ( ) is not recommended

Statement of justification is attached ( )

All **special conditions** listed in the candidate's contract letter have been fulfilled.

Dean's Signature_____

Item 7 **Vice President's Recommendation** Date _____

The Candidate: ( ) is recommended ( ) is not recommended

Statement of justification is attached ( )

Vice President's Signature _____

Item 8 **President's Recommendation** Date _____

The Candidate: ( ) is recommended ( ) is not recommended

President's Signature _____

APPENDIX 2

Sample Tenure Dossier

Office of Academic Affairs
Pittsburg State University

CANDIDACY FOR TENURE

Item 1 Name Schroder (Last) Patrick (First) H. (Middle)

SIGNATURE (Signature of Candidate) Oct.12, 2001 (Date)

Item 2 Present Rank Assistant Professor of Technology Year 1997

Prior Rank(s) _____ Year _____

_____ Year _____

Item 3 Academic Record

Degree	Year	Institute Attended
Ph. D.	1989	Michigan State University
M.S.	1985	Virginia Polytechnic Institute
B.S.	1983	Virginia Polytechnic Institute

Item 4 Department Tenure Committee Date 10/26/01

The Candidate: (X) is recommended ( ) is not recommended

Statement of justification is attached (X)

All **special conditions** listed in the candidate's contract letter have been fulled.

Committee Chairperson's Signature SIGNATURE

Item 5 Department Chairperson Date 11/9/01

The Candidate: (X) is recommended ( ) is not recommended

Statement of justification is attached (X)

All **special conditions** listed in the candidate's contract letter have been fulled.

Department Chairperson's Signature SIGNATURE

Item 6 Dean's Recommendation Date 12/14/01

The Candidate: (X) is recommended ( ) is not recommended

Statement of justification is attached (X)

All **special conditions** listed in the candidate's contract letter have been fulled.

Dean's Signature SIGNATURE

Item 7 Vice President's Recommendation Date 2/4/02

The Candidate: (X) is recommended ( ) is not recommended

Statement of justification is attached (X)

Vice President's Signature SIGNATURE

Item 8 President's Recommendation Date 2/18/02

The Candidate: (X) is recommended ( ) is not recommended

President's Signature SIGNATURE

I. GENERAL INFORMATION

A. Non-University Professional Experience

1. Design Engineer, Raytheon Corporation, Boston Massachusetts, 1996 (July) -1997 (August)

   Participated in the development of proposals for Department of Defense contracts for the Raytheon corporation and was responsible for the electronic design components of those contracts awarded. In cooperation with Department of Defense personnel, prepared operator and maintenance training systems for all equipment manufactured. Participated in the evaluation of both the components designed and the training systems developed.

2. Systems Engineer, General Electric Company, Bridgeport, Connecticut, 1989 (January) -1996 (June)

   Developed analog, digital, and integrated circuits for military weapons control systems. Was responsible for the development and production of training and maintenance manuals concerning this aspect of the weapons complex. Participated in field tests of the complete weapon's control system.

3. Full-Time Summer Employment

   2001 Electrical Engineer, Advanced Machine Development Operation, Motorola Corporation, Joplin, Mo. Engaged in design**,** troubleshooting and acceptance testing of production test equipment. The work required knowledge of devices and components used in the latest state-of-the-art digital and analog circuits.

   2000 Electrical Engineer, Bowmar Instrument Corporation, Chicago, IL. On contract, wrote technical maintenance manuals for a U. S. Signal Corps project which utilized state-of-the-art digital and analog circuits.

B. Licenses, Registrations, and/or Certifications

2000 Registered Professional Engineer (PE) (Electrical Engineering, Kansas)

1985 Vocational Teacher's License, Michigan

C. Awards and Honors

2000 North Central Section, American Society for Engineering Education Annual Meeting. "Best Paper Award" (certificate and cash award of $100).

D. Memberships in Academic, Professional, and Scholarly Societies

1998 Kansas Society of Professional Engineers
1998 American Society of Engineering Education
1990 Institute of Electrical & Electronic Engineers

E. Qualitative and Evaluative Comments and General Information

It is significant to note that Professor Schroder has utilized his summer periods to participate in fields directly related to his university expertise.

His eight years of experience in industry provided an excellent background for his teaching in the PSU technology program. The early work done in training on electronic systems is directly related to his instructional responsibility at the University as is his graduate teaching experience. Professor Schroder is a registered professional engineer and a member of relevant professional societies.

II. TEACHING

A. Courses Taught

Number	Titles
546	Electronic Controls
241	Printed Circuit Laboratory
140*	Applied Electricity
640	Application Design Problems
244	Logic Circuits
145	Electronic Devices and Circuits
682	Digital Signal Processing
649	Linear Integrated Circuits
543	Industrial Electronics
447	Communication Theory and Circuits
748	Process Controls
242*	AC and DC Machines
345	Electronic Instruments
142	Basic Semiconductors
640	Linear Integrated Circuits

B. Teaching Load

Year	Semester	Converted Hours*	Preparations
2001	Fall	15	3

	Spring	18	4
2000	Fall	17	3
	Spring	15	3
1999	Fall	18	4
	Spring	15	3
1998	Fall	15	4
	Spring	16	3
1997	Fall	15	3

* Since much of his teaching load involves laboratory assignments, Professor Schroder's teaching load is evaluated under the converted hour option, with the approval of the Dean and the Department Chair.

C. Teaching Assignments Away from Home Campus

During the fall semester of 1999 Professor Schroder taught an eight week specialized Continuing Studies course in digital systems at the Motorola Corporation in Joplin. The eighteen students of this particular program were all graduate engineers working at Motorola. He furnished extensive notes on the techniques of mapping in solving practical logic problems. He also prepared numerous Powerpoint materials and diagrams representing various different digital systems and published a manual incorporating hardcopies of these materials for distribution to the students. These manuals were used in conjunction with the CAI laboratory that Professor Schroder developed especially for the course.

D. Contribution to Course and Curriculum Development

Professor Schroder developed a course involving digital signal processing (ETECH 682 Digital Signal Processing) and wrote the textbook material for this course. (One was not available on the open market.) This text and the associated the laboratory manuals, also written by Professor Schroder, are not only used at Pittsburg State, but they are presently being used by the Wichita State and Kansas State Technology programs.

Due to the efforts of Professor Schroder, the electronics technology curriculum has added the Logic Circuits 244 course and the Digital Signal Processing 682 course.

Professor Schroder authored approximately 20% of an expansive document prepared for the ECPD accreditation visit in March of 1976.

E. Preparation of Instructional Media

During the fall semester of 1999 Professor Schroder taught an eight week specialized Continuing Studies course in digital systems at the Motorola Corporation in Joplin. The eighteen students of this particular program were all graduate engineers working at Motorola. He furnished extensive notes on the techniques of mapping in solving practical logic problems. He also prepared numerous Powerpoint materials and diagrams

representing various different digital systems and published a manual incorporating hardcopies of these materials for distribution to the students. These manuals were used in conjunction with the CAI laboratory that Professor Schroder developed especially for the course.

682 Digital Signal Processing
Completely new course. Wrote the 380 page text, Introduction to Digital Signal Processing, Halstead Publications, 2000. Developed lectures using Powerpoint diagrams and text material. Provided hardcopy handouts to students. Used Blackboard and Internet extensively for student assignments and class communications.

649 Linear Integrated Circuits
Complete lecture notes and laboratory procedures by Professor Schroder. Approximately 100 typewritten pages. Published on campus.

244 Logic Circuits
Textbook, Modern Logic Circuits and Their Application, Jorgensen Publishers (1999), and associated laboratory manual consisting of 125 typewritten pages authored by Professor Schroder.

241 Printed Circuits Laboratory
Complete textbook and laboratory manual (Laboratory Exercises in Printed Circuits), published on campus, totaling 97 pages authored by Professor Schroder.

F. Experimentation and/or Research in Instructional Methods and Techniques

"Laboratory Instruction Improvement Program", an inquiry-based approach to laboratory courses, was originated and implemented by Professor Schroder. Prior to the implementation of the program, the students used the standard "cookbook" laboratory approach. The hypothesis tested was that the student could learn more from an experiment if he were encouraged to think out the problem, on his own, and use available reference material to perform each step. The electronic technology faculty have determined from subjective evaluations that the level of student understanding and interest has improved markedly using this method. They voted to incorporate this instructional approach into all of the department's laboratory courses.

In order to optimize space and the use of equipment in the electronic technology laboratory, the premise was established that "arranged hours" would serve two purposes, i.e., maximize the utilization of expensive laboratory equipment and at the same time enable the students to work in smaller technology laboratory courses with the following results.

The expenditure of capital equipment funds has been reduced in "established" laboratory areas. Students now spend more time in the laboratory and perform investigative work beyond the required experiment. Students spend more time in small group laboratory activities.

G. Institutes, Workshops, and other Programs Attended

Annual Conference, American Society for Engineering Education (ASEE), Dallas, TX, Spring , 2001
Regional Conference, ASEE, St. Louis, MO., Spring, 2000
Annual Conference, North Central ASEE, Minneapolis, MN, June, 1999
Microprocessor Seminar, Institute of Electrical & Electronic Engineers (IEEE), Columbus, OH, Spring, 1999
Microprocessor Seminar, (IEEE), Dayton, OH, Fall, 1998

H. Impact on Students

Course Evaluations:

S.P.T.E. Surveys: Professor Schroder uses the S.P.T.E. course evaluations in all of his courses. The summary sheets for these evaluations are included in Appendix 1. Those summaries demonstrate that, in the great majority of cases, students have rated Professor Schroder and his course above the sixtieth percentile level for each of the items listed under Perceived Quality Index (viz., Course Design, Rapport with Students, Grading Quality and Course Value). In fact, please note that there is a significant proportion of the ratings in the categories Rapport with Students and Course Value that fall well above the seventieth percentile level. The overall Perceived Quality Index ratings are consistently above the 65^{th} percentile level. Together with the breakdown by Item Description on the reverse side of the summary sheets, these results clearly demonstrate that students consider Professor Schroder to be an excellent instructor. The summary sheets also demonstrate that students generally consider his courses to be above average in difficulty and workload, with overall ratings in Perceived Course Demands typically at or around the sixtieth percentile level. The overall Perceived Course Demands ratings range from the twentieth percentile level to above the ninetieth percentile level. In this connection, please note that these variations occur for both introductory and advanced level courses. These variations are not surprising in view of the difficulty of the subject matter. It should be noted that, according to the designers of the S.P.T.E. instrument, there is no correlation between Perceived Quality Index and Perceived Course Demands in the use of this instrument.

Finally, the designers report that evaluators should not make distinctions regarding percentile results in the 25% to 75% range, but that scores below 25% and above 75% are sufficiently significant to take into account along with other data. In this respect, please note the substantial number of ratings of 75% or higher for Professor Schroder in every category under Perceived Quality Index.

Complete sets of students' written comments on the S.P.T.E. Comment Sheets are included in the Appendix 1 for selected typical introductory and advanced courses for each year. The remainder are available in the office of the chairperson. These comments demonstrate a high level of student satisfaction and an atmosphere in which students feel free to make constructive comments for improvement of the courses.

S.G.A. Evaluation Surveys: Professor Schroder has also used the course evaluation administered by the S.G.A. in several courses, and the results of those evaluations are included in Appendix 2 along with a summary. The evaluations are uniformly positive concerning Professor Schroder's enthusiasm, energy, ability to explain difficult materials, and rapport with students. The students also consistently express appreciation for the usefulness of course content and for the fact that materials are current. There are specific suggestions early on regarding the group assignments in the open printed circuits laboratories, and also for expanded use of handouts to supplement the CAI and Powerpoint materials in two of the lecture courses, that Professor Schroder has implemented. The subsequent evaluations in these courses indicate substantial positive response by the students.

Comments from Graduates:

One of the questions included in a questionnaire mailed in an electronic technology graduate survey was "Do you have any suggestions about the courses you took or about instructors that you had?"

Typical of the answers these questions was the one sent back by Vaughn Martin, 1998, (presently at Motorola) "... As for the courses, the ones Professor Schroder taught were the most helpful to me..."

Or, the reply from Noel Kuch, 1998, presently a sales engineer with Computer Logic Corporation: "...I was pleased to see the emphasis on digital signal processing and logic and found it indispensable when I took my job in industry."

The following comments are quoted from the students who were voted by the technology faculty to receive the awards for the Outstanding Senior Design Projects in 1999 and 2000.

Gerald Capehart, 2000, Design Engineer, Motorola Corporation: "I am working on design of digital communications equipment. I find good and numerous applications for the material learned in Professor Schroder's classes."

Robert A. Pitsch, 1999, Liaison Engineer, Radio Corporation of American: "I am making direct use of knowledge gained in Professor Schroder's classes in this program. I feel that my work is proof of the effectiveness and value of Professor Schroder's instruction."

Undergraduate Research:

Professor Schroder directed the projects for both Mr. Capehart and Mr. Pitsch that are mentioned above. He encouraged and assisted them in preparing their work for presentation/publication, and both papers were presented at professional conferences and published in professional journals. See III.A.1. and III.B. Professor Schroder introduces all of his senior students to professional organizations by arranging for them to attend at least one professional conference.

I.. Student Counseling and Advising

1. During the summer of 1999, Professor Schroder was advisor for all incoming technology students.

2. Professor Schroder normally has an advising load of 20 to 30 electronic technology majors. The fact that less than 10 percent of his advisees withdraw from the program prior to graduation attests to the quality of his advising. This last year (2000 - 2001) Professor Schroder took on an extra load of 20 students for a colleague who was on sabbatical leave.

   Number of Assigned Advisees per Semester:

Year	Spring	Fall
1997	NA	14
1998	23	26
1999	24	29
2000	28	45
2001	46	NA

3. A summary of the results of the advisement surveys completed each semester since Fall 1999 is included in Appendix 3. The survey uses the instrument developed by the Department of Electronic Technology and it is distributed each semester by Prof. Schroder to his advisees at the end of the advisement sessions. Although the participation by students, which is voluntary, was only on the order of 20%, all of those who completed the survey gave Prof. Schroder high marks (greater than 8 on a 10 point Likert scale) for his availability, for his knowledge of the curriculum and University requirements, and for his knowledge of career paths.

J. Other Evidence of Teaching Effectiveness

Further evidence of teaching effectiveness is demonstrated by the fact that approximately 90% of the senior electronics technology students elect senior design projects in Professor Schroder's field of expertise. All of the students, who for the past three years were awarded the "Outstanding Senior Design Project Award", were advised by Professor Schroder.

As noted above, two of the publications and presentations listed under III.A.1. and III.B. were co-authored with students, one of whom was the principal author and presenter.

K. Qualitative and Evaluative Comments on Teaching

Professor Schroder has instituted new courses and prepared textbooks and laboratory tests where none existed before. He has attended workshops that enable him to evaluate new equipment for the laboratory, update his technical competence, and revise his teaching methods. Since the implementation of Professor Schroder's new digital courses, numerous employees of local industry have successfully petitioned for additional evening sections to be added so that they could enroll. He is consistently recognized by his students for excellence in teaching.

III. RESEARCH, SCHOLARLY ACTIVITY, AND/OR CREATIVE ENDEAVOR

A. Publication

1. Papers

Schroder, F. H., "Teaching the Microprocessor in Electronic Technology", *Proceedings of the North Central Section of American Society of Engineering Education* **42**, 367 (2000).

Capehart, G.* and Schroder, F. H., "An Algorithm for High Speed Digital Signal Processing", *Journal of Applied Electronics* **35,** 832 (2000).

Schroder, F.* and Pitsch, R. A., "High Speed Digital Processing for an Optically Coupled Projection Device", *Journal of Photonic Engineering* **28**, 34 (1999).

* Student co-author

2. Monographs

Schroder, F. H., Introduction to Digital Signal Processing, Halstead Publications, Brynn, NJ (2000).

Schroder, F. H., Modern Logic Circuits and Their Application, Jorgensen Publishers, St Louis, MO (1999).

3. Other Publications

The laboratory manuals listed in Section II.E. were printed by the Pittsburg State University Duplication Services, bound and sold to the students through the University Bookstore.

4. Works in Progress

Digital Electronics. Professor Schroder has a contract with Marcel-Dekker Publishing Company for this 300-page textbook to be used in the sophomore year of community colleges, junior colleges, four-year colleges and universities. The

consulting editors for the series are Dr. Richard Ungrodt, Vice President for Academic Affairs, Milwaukee School of Engineering and Dr. Gerald Rath, Dean of Engineering Technology, Wichita State University.

Professor Schroder is presently preparing a paper to be submitted for presentation at the Annual Conference, ASEE, Spring, 2002. This paper is tentatively entitled, "Senior Design Projects with Socially Redeeming Values".

B. Lectures, Papers, Speeches Presented at Meetings or other Educational Institutions

Schroder, F. H., "Teaching the Microprocessor in Electronic Technology", North Central Section of American Society of Engineering Education, Minneapolis, MN, April, 2000.

Capehart, G.[+*] and Schroder, F. H., "An Algorithm for High Speed Digital Signal Processing", ASEE Conference, Minneapolis, MN, November, 2000

Schroder, F.[*] and Pitsch, R. A., "High Speed Digital Processing for an Optically Coupled Projection Device", Regional Meeting of Midwest Section of IEEE, Chicago, IL, March, 1999

[+] Student presenter
[*] Student co-author

As noted earlier (Awards and Honors, Section I. D.) Professor Schroder received the "Best Paper Award" for the paper entitled, "Teaching the Microprocessor in Electronic Technology". More than150 engineering and technology educators representing over 50 colleges and universities in the six-state North Central region attended the meetings.

C. Institutes, Workshops, and other Programs Attended

Microprocessor Seminar, Institute of Electrical and Electronic Engineers (IEEE), Phoenix, AZ, Spring, 1999

Microprocessor Seminar, IEEE, San Antonio, TX, Fall, 1998

D. Evidence of National or International Recognition

1. Professor Schroder has been invited to be the moderator of the session on High Speed Digital Processing at the April 2002 meeting of the Southwest Section of ASEE in Tempe, AZ.

2. As stated previously, Professor Schroder received the "Best Paper Award" for his paper entitled "Teaching the Microprocessor in Electrical Technology", at the ASEE Section meeting held in April, 2000.

3. Professor Schroder is recognized throughout Kansas as a leading authority on the teaching of digital logic and digital signal processing courses. Other Regents' campuses are using his text materials.

4. Professor Schroder was invited (Spring, 2000) by the McGraw-Hill Publishing Company, New York, to review the text, Fundamentals of Digital Analysis, Sandige, Richard S.

E. Current Research and/or Creative Endeavor Interest and Projects in Progress

At the present time, Professor Schroder is in the process of designing a "Digital Signal Processing Center" for Pittsburg State University. The Center is an outgrowth of the consulting and teaching activities that Professor Schroder has performed with Motorola Corporation. As a result of these activities, Motorola has agreed to provide instrumentation for the Center for the first five years of operation. The Center will provide a variety of instruments including signal generators, signal processing devices, testing and calibration instruments, and high speed computers with associated software packages and display devices.

F. Qualitative and Evaluative Comments on research and Creative Endeavor

Professor Schroder is recognized as a leading authority in the Regent's University System in the field of digital electronic signal processing. Letters from faculty members at other Kansas locations are quoted below.

From Dr. Stephen R. Anderson, Professor of Electronic Technology, Wichita State University:

"...Fred has interacted in many ways with the various members of our faculty and without exception we have the highest respect for him. He not only has a superb technical background, which he has enhanced by frequent industrial involvement's, but he understands the many problems that are unique to technology in a way that few other professors do."

From Nikoli Soranak, Associate Professor of ElectronicTechnology, Kansas State University:

> "...I found Fred's suggestions and opinions about the course sequence in digital electronics as most realistic and agreeable with student's needs in out department. He always has a good feel for students' background and never overestimated or underestimated their capabilities of understanding the material."

From William T. O'Hare, Associate Professor of Electronic Technology, Kansas Technical Institute:

> "Professor Schroder has demonstrated that he is capable of showing leadership in scholarly activity and creative endeavors by his productions of textbook and instructional materials. He is recognized on both a local and national basis as having expertise in digital electronics. The quality of this many contributions are attested to by the comments of his colleagues."

IV. SERVICE

A. University Service

1. Outreach

a. Sponsored Conferences, Workshops, etc.

Professor Schroder acted as Regional Director and Workshop Instructor for the Continuing Studies course titled "Introduction to Digital Circuits and Signal Processors", offered in the spring, 2000. This WEB-based course was sponsored by the Southeastern Kansas section of the Institute of Electrical and Electronic Engineers. Forty electrical engineers from the Southeastern Kansas area were enrolled in the course.

In cooperation with the Business and Technology Institute and Continuing Studies, Professor Schroder taught an eight week specialized course on digital systems at the Motorola Corporation in Joplin in the fall semester of 1999. He supplemented the course with a one day, non-technical workshop for the management personnel of Motorola on new developments and trends in high speed digital processing. Eight of the managers of Motorola attended this workshop, which was sponsored by the Business and Technology Institute.

2. University-wide or College-wide

a. College of Technology and Applied Science Curriculum Committee, Chairman 1999-2001

b. College of Technology and Applied Science Retention Committee, Spring 2000

c. University Library Advisory Committee, 1999-2001

d. Pittsburg State University Faculty Senate, 2000-2001

3. Departmental

a. Interim Chairperson, Department of Engineering Technology, 1999-2000. (Under Professor Schroder's leadership, the first Electronics Technology Alumni Committee was organized to assist electronic technology students in financing their senior design projects.

b. Faculty Sponsor, Tri-Epsilon, Honor/service organization for electronics technology students, 1998 – present.

4. Other University Service

While Professor Schroder was Interim Department Chairman he initiated a faculty good-will trip for the purpose of encouraging continued cooperation between PSU and Southeast Kansas Community Colleges. Professor Schroder exchanged programs and goals with the administration and faculty at the community colleges and counseled prospective students.

B. Professional Service

1. Offices held in Academic, Professional, and Scholarly Societies

Secretary, Southeast Kansas Electrical Engineers Association, 2000
President-elect, Southeast Kansas Electrical Engineers Association, 2001

2. Public and/or Governmental Service Activities

Reviewed the sound system of the Pittsburg City Memorial Auditorium and prepared specifications for an extensive upgrade, 1999.

3. Consulting Activities

1998-to present Motorola Co., Joplin, MO

Professor Schroder is in the process of designing, developing, and testing an optically coupled digital signal processor. The processor is integral to a video display/projection device.

1998-to present, States Engineering Co., Fort Smith, AR.

Professor Schroder has, over a period of several years, designed, developed and tested a system capable of setting, sensing and regulating the moisture content of sand for use in the foundry equipment. Professor Schroder also designed the required electronic controls for that equipment.

C. Community Service

1. Sponsor and leader of the "Electronics" Explorer Post, Boy Scouts of America, 1999 - to present.

2. Sunflower Kiwanis, 1998 – present. (Professor Schroder has also served on several community service committees of this organization.)

D. Qualitative and Evaluative Comments on Service

Professor Schroder has been active as an engineering consultant to nationally-known firms. This type of service not only assists local industry, but also enables Professor Schroder to provide practical work experience for his students and to bring current industrial practical experiences back to the classroom. It also enhances, in a most practical way, the reputation of Pittsburg State University. In cooperation with the Division of Continuing Studies and B.T.I, Professor Schroder coordinates and teaches a digital processing workshop and courses offered to electrical engineers in the four-state region. This contribution has been well received by the engineers and industries it serves.

Professor Schroder has served the University and his department well on the Faculty Senate, various university and departmental committees, and as a student advisor. He is a team player and he has always served well, volunteering his services and actively participating in each activity with enthusiasm.