

**Pittsburg State University's Academic Program Review – 2000-2004**  
(Review Performed During FY 2005)

**1. Program**

<b>Department:</b>	<b>Technical Education</b>
<b>Program Area:</b>	<b>Industrial Education</b>
<b>Degree:</b>	<b>Specialist in Education</b>
<b>Option/Specialization:</b>	<b>Option I Thesis; Option II Problem</b>
<b>Program Faculty:</b>	<b>Primary: Dr. Greg Belcher, Dr. Robert Schwindt, Dr. Linda Seifert</b> <b>Support: Dr. John Chen, Dr. Ray Denton, Dr. Peggy Haller, Dr. Mark L. Johnson</b> <b>Dr. Shawn Adams, Dr. John Iley, Dr. Jesus Rodriguez</b>

**2. Departmental Credit Hour Production Profile** (developed from information supplied by Institutional Research)

		<b>FY/00</b>	<b>FY/01</b>	<b>FY/02</b>	<b>FY/03</b>	<b>FY/04</b>
<b>Student Credit Hours:</b>	<b>UD</b>	2489	1805	2015	2110	2387
	<b>GR</b>	2368	2542	1945	1763	1652
<b>Cost Per Credit Hour:</b> (based on actual expenditures)	<b>UD</b>	119.64	149.18	154.17	168.95	*
	<b>GR</b>	166.35	207.43	214.37	234.92	*
<b>OOE Budget: (from dept. records)</b>		\$42,330	\$42,330	\$40,636	\$36,979	\$39,898

**3. Program Profile** (developed from information supplied by Institutional Research)

	<b>FY/00</b>	<b>FY/01</b>	<b>FY/02</b>	<b>FY/03</b>	<b>FY/04</b>
<b>Number of Program Majors:</b>	11	11	9	12	6
<b>Number of Graduates:</b>	9	3	11	8	9
<b>Retention Rate:</b>	NA	NA	NA	NA	NA
<b>ACT Scores of Majors:</b>	NA	NA	NA	NA	NA

<b>Ethnicity</b>	<b>FY/00</b>	<b>FY/01</b>	<b>FY/02</b>	<b>FY/03</b>	<b>FY/04</b>
<b>Native American</b>					
<b>Asian</b>		1			
<b>Black</b>					
<b>Hispanic</b>					
<b>White</b>	3	1	2	6	5
<b>NRA</b>	2			2	1
<b>Other</b>					
<b>N/A</b>	6	9	7	4	
<b>All</b>	11	11	9	12	6
<b>Gender</b>					
<b>Male</b>	6	6	5	7	3
<b>Female</b>	5	5	4	5	3

#### **4. Program Foundation**

##### **a. Program Purpose:**

1. The degree of Specialist in Education, the highest degree offered by the university, requires approximately two years of study beyond the bachelor's degree and one year of advanced study beyond the master's degree in Industrial Education. It was originally designed to be a terminal degree, independent of further graduate study.
2. A minimum of 30 graduate semester hours beyond the master's degree is required, although frequently the specialist degree program may require more than this.
3. Traditionally, the specialist degree was a professional degree for educators at the elementary, secondary, vocational, and higher education levels. It now also serves those in business organizations, corporate industry, public agencies, and private service organizations desiring advanced graduate study.
4. Although the Specialist in Education degree is housed under the Technical Education Department, students in all disciplines in the College of Technology participate, with their advisor and thesis committee selected from the graduate faculty most appropriate for the participants' goals. The degree is normally earned in the discipline in which the master's degree has been awarded.
5. The program of study is developed based on the students' academic background and professional interests.
6. The education specialist degree is being utilized by educators and technologists with a masters degree as prefatory education for the doctorate. Courses as a part of this degree are being applied toward a doctorate at doctorate granting institutions, with some cooperative arrangements.

##### **b. Program Goals and Objectives:**

1. To provide advanced graduate level preparation for persons interested in study and research in the areas of administration, teaching, curriculum development, human resource development and technology innovation.
2. To utilize participants' professional experience in a structured program leading to the development of specialized and advanced professional competence.
3. To provide accessible graduate study above the master level and for persons interested in a cooperative doctoral program.

##### **c. Program Theoretical and Conceptual Frameworks:**

1. The specialist degree program is especially designed to make effective use of students' professional experience, which is required as part of the admission standards, as well as to utilize previous academic study. Specialized and advanced professional competence beyond the master's degree is the main objective of study.
2. Ed.S. study stresses research in all courses, including special research projects, seminars, practica, and internships as well as the development of depth of knowledge of the work of scholars in the disciplines of study.
3. The rapid expansion of technology and knowledge now requires individuals to identify and analyze pertinent data bases, and develop innovative ways to solve problems utilizing technology.

##### **d. Response to Previous Program Review:**

The 1999 Program Review noted lack of technical specialty courses at the 900 level for Ed.S. Also at that time, there was difficulty finding time to find Ed.S. disciplines in technical areas or collaboration with the College of Education SSLS program. Since that time, the department has:

- 1) Offered the courses of TTED 990, TTED 991, and TTED 992 for those special needs participants, as well as assigning faculty to monitor the course of study for students.
- 2) Offered TTED 993 for individual candidates in the technical education area
- 3) Continued to monitor the content of research by designing a checklist to help the participant to guide the direction of research.

##### **e. Strategic Planning Initiatives Directly Related to Program:**

**Mission Statement:**

The Department of Technical Education Provides quality time and cost effective teacher preparation, human resource development, technology management and environmental safety course offerings to meet individual personal educational growth needs and meet the comprehensive program requirements. The primary purposes of the department are to:

- 1) Provide high quality pre-service and in-service teacher education for career and technical teachers at the baccalaureate and graduate levels.
- 2) Develop leaders in the field of Environmental Health and Safety at the state, national, and international level through articulation with business and industry.

**GOAL 5:** Improve research of graduate students in the Technical Education Department.

*Objective 5.1* Develop research proposal development procedures and guidelines for students and advisors in the department.

*Objective 5.2* Provide seminars for graduate students and faculty on research standards, ethics, plagiarism, proposal development, establishing research procedures, reporting findings, working with human subjects, and other topics relevant to research writing.

*Objective 5.3* Work towards developing articulation agreements with other universities that offer doctorate level programs in related fields of study.

*Objective 5.4* Encourage students completing the thesis option to continue study in a doctoral program in a related field of study.

*Strategy:* To improve research preparation and advisement skills for faculty in the department and improve graduate student research performance.

*Performance Measure:* Establish qualitative and quantitative assessments for student research projects in the department.

**5. Program Course Information - Include only courses offered by this Department**

No.	Course	<b>Type of Faculty</b> T = Tenure Track GA = Grad. Asst. O = Other Note % of sections taught by each.	<b>Enrollment trend (3 yrs)</b> ++ = >25% inc. + = 10-25% inc. “=” = w/in ±10% - = 10-25% decr. -- = >25% decr.	<b>When Scheduled</b> F = Fall S = Spring R = Summer	<b>Type of Course</b> R = Required E = Elective C = Cognate/ Support CAP = Capstone/ Assessment	<b>Rationale (Why course?)</b>
1.	TM 800 Industrial Organization Management	T	=	F	E	Support Course
2.	TTED 801 Organization and Admin of Voc Ed	T	++	S	E, R	Required of those wishing an administrative certificate, Elective for others
3.	HRD 804 Leadership Techniques and Procedures	T	=	S, R	E	Support Course
4.	TTED 805 Special Problems	T	=	F, S, R	E	Support Course
5.	TTED 808 Cooperative Education	T	-	R, F	E	Support Course
6.	TTED 810 Seminar	T	++	F, S, R	E	Support Course
7.	HRD 815 Current Issues in HRD	T	-	S, R	E	Support Course
8.	TTED 819 Facilities for Voc Ed	T	-	F	E	Support Course
9.	TTED 820 Hazardous Materials	T	=	F	E	Support Course
10.	TTED 821 Industrial Pollution	T	=	R	E	Support Course
11.	TTED 822 Risk Management	T	=	S, R	E	Support Course
12.	TTED 823 Industrial Hygiene/ Toxicology	T	=	R	E	Support Course
13.	TTED 825 Practice Management Industrial Ergonomics	T	=	S, R	E	Support Course
14.	TTED 827 Safety Issues in Transportation	T	=	R	E	Support Course
15.	TTED 828 Fire Prevention	T	+	S, R	E	Support Course
16.	TTED 829 Environmental Health and Safety Law	T	=	F, R	E	Support Course

17.	TTED 830 Safety Administration	T	+	F	E	Support Course
18.	TTED 831 Characteristics of the Adult Learner	T	=	R, F	E	Support Course
19.	TTED 832 Needs Assessment	T	+	R, F	E	Support Course
20.	TTED 845 Instruction System Design	T	-	F, R	E	Support Course
21.	HRD 850 Graduate Study in HRD	T	=	F	E	Support Course
22.	HRD 851 Career Planning in HRD	T	=	S, R	E	Support Course
23.	HRD 852 Organizational Development/Change	T	=	S, R	E	Support Course
24.	HRD 853 Workforce Development	T	--	R	E	Support Course
25.	HRD 854 Consulting for HRD Professionals	T	+	S, R	E	Support Course
26.	HRD 855 Forecasting Benefits of HRD	T	++	R, F	E	Support Course
27.	HRD 856 Diversity in the Workplace	T	-	R, F	E	Support Course
28.	HRD 857 Ethics Values/Legal Issues in HRD	T	++	R	E	Support Course
29.	HRD 861 College/ University Curriculum/ Technology Innovation	T	+	S, R	E	Support Course
30.	HRD 862 Strategic Planning and Development Innovation	T	=	F, S	E	Support Course
31.	TTED 873 Internship for Technical Teachers	T	=	F, S, R	E	Support Course
32.	TTED 875 Instructional Materials for Technical Teachers	T	+	S	E	Support Course
33.	TTED 879 Professional Presentations	T	=	S	E	Support Course
34.	HRD 883 Internship in HRD	T	=	F, S, R	E	Support Course
35.	TTED 887 Data Analysis	T	=	S, R	E	Support Course
36.	TTED 890 Research and Thesis	T	=	F, S, R	E	Support Course
37.	TTED 891 Methods of Research	T	=	S, R	E	Support Course

38.	TTED 893 Performance Evaluation	T	=	F, S, R	E	Support Course
-----	---------------------------------	---	---	---------	---	----------------

39.	TTED 894 History and Philosophy of Voc Ed	<b>T</b>	=	<b>R, F</b>	<b>E</b>	Support Course
40.	HRD 896 HRD as a Profession	<b>T</b>	=	<b>F, S</b>	<b>E</b>	Support Course
41.	TTED 897 Teaching Special Voc Students	<b>T</b>	-	<b>R, F</b>	<b>E</b>	Support Course
42.	TTED 898 Computer Generated Multimedia	<b>T</b>	=	<b>S, R</b>	<b>E</b>	Support Course
43.	HRD 899 Planning and Implementing an HRD Program	<b>T</b>	=	<b>F, S, R</b>	<b>E</b>	Support Course
44.	TTED 900 Seminar in Research	<b>T</b>	+	<b>F, S, R</b>	<b>R</b>	Develop Research Proposal
45.	TTED 990 Special Research Project	<b>T</b>	=	<b>F, S, R</b>	<b>R</b>	Option I Research
46.	TTED 991 Special Investigations	<b>T</b>	=	<b>F, S, R</b>	<b>R</b>	Option II Research
47.	TTED 992 Special Investigations	<b>T</b>	+	<b>F, S, R</b>	<b>E</b>	Support Course
48.	TTED 993 Current Problems	<b>T</b>	+	<b>R, F</b>	<b>E</b>	Support Course

**6. Support Course Information - Courses Offered by Other Departments**

No.	Course No.	Course	Rationale (Why course?)	Comments (Critique)
1.		All 700, 800, and 900 Level Courses may be counted with permission of the advisor and department chair with final approval by the Graduate Dean.		
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				

**7. Sequence of Courses in Major**

Sequence of Courses	Rationale for Sequence
TTED 900 prerequisite to TTED 990 and TTED 991	<p>Research proposal is developed in TTED 900 as well as other research courses, which then must be approved by the advisor and thesis committee for Option I before the student conducts the actual research in TTED 990 or 991.</p> <p>Sequence of other courses dependent on the courses selected by the candidate and their advisor for their program. Prerequisites may exist, depending on courses selected.</p>

**8. Admission Requirements to Program**

Requirements	Justification for Requirements
<p>Master's degree in related area</p> <p>University graduate school admission requirements must be met</p> <p>Admission to candidacy</p>	<p>Courses in the specialist degree build upon knowledge and competencies developed in a master's degree. Additional hours will be required for students with a master's degree from another discipline, as determined by transcript analysis. This will range from 9 – 18 semester hours. The individual may be referred back to a master degree if they do not have relevant course work.</p> <p>Conditional admission may be granted when evaluation of the applicant's record indicates that a trial period of limited enrollment may be desirable, or if the applicant has deficiencies in their proposed area of specialization.</p> <p>Admission to Candidacy can be made after all deficiencies have been successfully removed, satisfactory study has been achieved in the first courses taken, a research option has been selected and the advisor, department chair, and graduate dean approves the degree program.</p>

## **9. Program Advisement**

### **a. Advisement Model Used:**

Graduate faculty are assigned ED.S. students by the department chair, based upon their present advisement load, course teaching load, and other research or service responsibilities. Advisors are assigned to match their areas of expertise with the student's academic goals.

### **b. Training Preparation of Advisors:**

New Faculty members are given a limited number of advisees, allowing them more time with each advisee. They are provided assistance by their department chair and other graduate faculty in the department. New faculty members are assigned master level students for experience in graduate advisement before they are assigned Ed.S. Level students.

### **c. Advisement Link to Faculty Appraisal:**

Faculty members each year establish objectives for teaching, research and service through interaction with the department chair. For most faculty members, selected objectives under teaching and research are linked to professional preparation and advisement of Ed.S. students.

**10. Evidence of Program Quality (May include instruments, etc. in appendices)**

	<b>Evidence of Quality</b>	<b>Yes or No</b>	<b>Description</b>	<b>Results</b>
a.	Undergraduate Assessment Instrument	NA		
b.	Graduate Comprehensive Instrument	YES	Faculty Members develop essay exams for the courses they teach. Candidates select 6 courses from their candidacy plan.  Option I candidates must defend their thesis.	New exam questions are written on a regular basis. Over 90% of all candidates pass comprehensive exams the first time. Those obtaining less than a satisfactory score on any exam are required to retake that exam the following semester. In some instances, an oral exam may be substituted for the written exam.  Candidates who fail to obtain a satisfactory score on their second attempt may be assigned additional coursework.
c.	Evidence of Impact of Assessment/Comprehensives on the Curriculum/Program	YES	Informal student feedback. Graduate interviews.	Each candidate's advisor reviews the results of their advisees' exams.
d.	Student Satisfaction Survey	YES	All faculty utilize the SPTE or department course evaluation forms. Graduate Interviews.	Faculty utilize the results in appraisal discussions with department chair and to make curricular and instructional changes.
e.	Graduate Satisfaction Survey	YES	Graduate Interviews	Formal interview with graduates at completion of program.
f.	Employer Satisfaction Survey	NO		Currently being developed.
g.	Advisory Council Input	YES	Staff visitation and Advisory Councils for HRD, TED, and TM.	Input from advisory councils for TED and HRD programs. In addition the TED chair and faculty regularly visit with administrators of community and technical colleges to determine program needs.
h.	Placement of Graduates	YES	Follow-up with technical schools, technical and community colleges	Majority of students in the Ed.S. program are already employed and are looking for career enhancement and promotional opportunities.
i.	Accreditation/Certification Reviews	YES	University Accreditation	PSU is accredited by the North Central Association of Colleges and Schools.  Courses as a part of this program can be used for vocational teacher certification.  No separate accreditation agencies for accreditation of industrial education programs.

j.	Departmental Process for Course/Program Revision(s)	YES	Active department curriculum committee. Other department faculty review.	Programs and curriculum changes are discussed at regular department meetings. Changes proposed by faculty members are reviewed by the department curriculum committee before going to the University Graduate Committee.
k.	Advisement	YES	Advisors assigned based upon expertise.	Master degree advisor is usually assigned as advisor to insure continuity in program. Candidates can request a change of advisor to the department chair and graduate dean.

## 11. Program Summary

	<b>Narrative</b>
<b>a. Strengths</b>	<ul style="list-style-type: none"> <li>• This degree program provides practitioners an organized professional plan for the development of an area of expertise, rather than taking courses randomly.</li> <li>• Extension courses and the independent study nature of the research component, allow students across the state of Kansas to complete this degree.</li> <li>• Locating the degree in one College of Technology department reduces duplication of effort, while still allowing opportunities for graduate students in all disciplines. Graduate faculty are available in all departments for advisement</li> <li>• Some graduates enroll in doctoral programs at other universities. PSU TED has a cooperative program with the University of Arkansas, Department of Vocational Education. Doctoral graduates are now in teaching and administrative positions in technical schools and colleges, community colleges, and universities, in the U.S. as well as other countries.</li> <li>• College of Technology faculty members utilize this degree program to reduce the number of hours and length of time that they must attend at another university to complete their doctorate degree, as required for tenure earning positions and program accreditation.</li> </ul>
<b>b. Weakness</b>	<ul style="list-style-type: none"> <li>• There is a lack of information about the Ed.S. program offered in the College of Technology.</li> <li>• The name of “Industrial Education” is not clear and misleading even inside the college.</li> <li>• There is a need for a coordinator for the Ed.S. program in order to promote the program.</li> <li>• A college wide graduate program is needed since the number of participants is not that many. This program should include college-wide coordination.</li> </ul>
<b>c. Plans for Improvement</b>	<ul style="list-style-type: none"> <li>• The college of COT should have a real administration position for the Ed.S. program, which should include a budget for carrying out the mission , not just for in-state, but also for national and international programs.</li> <li>• A college wide committee is needed for setting up the program among the 4 departments in the college of technology. This would include the design of promotional material, recruitment efforts, and review of program regarding college, university, and international recruitment.</li> <li>• Tie the Ed.S. with a MS in Technology, MS in Engineering Technology and MS in HRD.</li> <li>• Assign a person as coordinator to oversee the program.</li> </ul>