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

1. Program

Department:	**Technical Education**
Program Area:	**Technical Teacher Education**
Degree:	**Master of Science**
Option/Specialization:	**Certification, secondary and post-secondary vocational technical education**
Program Faculty:	**Dr. Greg Belcher, Mr. William Bradrick, Dr. Ray Denton, Dr. Mark Johnson, Mr. Ted McCormick**

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

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

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

	FY/00	FY/01	FY/02	FY/03	FY/04
Number of Program Majors:	29	30	21	16	23
Number of Graduates:	16	13	20	12	3
Retention Rate:	NA	NA	NA	NA	NA
ACT Scores of Majors:	NA	NA	NA	NA	NA

Ethnicity	FY/00	FY/01	FY/02	FY/03	FY/04
Native American					
Asian		1	1		
Black					1
Hispanic					1
White	6	8	5	11	16
NRA		2		2	2
Other					
N/A	23	19	15	3	3
All	29	30	21	16	23
Gender					
Male	16	19	12	9	12
Female	13	11	9	7	11

4. Program Foundation

a. Program Purpose:

Build upon the teachers' previous experience and education to improve and maintain the quality of teachers within trade, industrial, technical and health occupations programs at the graduate level.

· To further enhance the competence of teachers within vocational technical classrooms and laboratories.

· To deliver certification courses for vocational/technical teachers across the State of Kansas.
The Kansas Department of Education will grant a certification to a teacher in the Trade and Industrial area after they have taken course work in the following areas:

1. Instructional System Design and Curriculum Development
2. Occupational Analysis
3. History and Philosophy of Vocational Education
4. Teaching Special Vocational Students
5. Cooperative Education
6. Instructional Methods for Technical Education

Other requirements for certification include; at least 4000 hours of directly related journeyman work experience (2000 of which must be continuous full-time employment); pass a competency examination; and participate in a thirty-hour pre-service workshop.

· To continue to develop vocational/technical teachers research knowledge and skills.

· To continue to increase the effectiveness of vocational/technical teachers throughout the four-state area.

b. Program Goals and Objectives:

To continue to strengthen vocational/technical teachers' understanding and implementation of the teaching/learning process through continued study in the education processes.

As a result of this program:

· Vocational/technical teachers should be able to help students to identify the utility of the competencies they are learning and provide real world relevance of this material.

· Vocational/technical teachers should be able to identify and describe who their students are so that they can modify materials to enhance the educational process.

· Vocational/technical teachers should be able to better organize instruction, so as to make their instruction more effective and efficient.

· Vocational/technical teachers should be able to further enhance the learning process by incorporating practice and feedback as essential ingredients in the educational process.

c. Program Theoretical and Conceptual Frameworks:

The complex role of vocational technical education has been shaped over the years by historical and social forces. In the 1950s and early 1960s in this country, the primary concern was the moral character of vocational/technical education teachers. Today, the public has greater concern about the individual instructors' vocational work experience and teaching abilities, yet vocational/technical teachers are also expected to be role models. Since technology has increased at a dramatic rate over the past 20 years, this has had a tremendous impact on vocational and technical programs. Within these programs, much has been added to their curriculums, but little has been taken away. Although little has been deleted from these curriculums, the amount of time students spends in the program is basically the same as it was 20 or 30 years ago. This requires that vocational and technical teachers be extremely effective and efficient. As a department, we deliver courses to these instructors to enable them to increase the effectiveness and efficiency of their instruction within their vocational/technical programs. We are also able to deliver courses that develop these students' research capabilities that can enable them to carry out research in their program areas.

A profile of a typical student that is working on a Masters' degree is as follows: A majority of our advisees are off-campus students and unlike the traditional university student. Currently, most are teaching full or part-time in a vocational/technical program at an area vocational technical school, area technical college, or community college across the State of Kansas. They are able to take many of the courses within our department because we take these courses off-campus. The course work within our department helps them to make the transition from being good at a trade, to teaching others to be good at their trade and also to become a better teacher.

d. Response to Previous Program Review:

- In the last program review it was stated that "there was a lack of published materials" and "minimum exposure at the national level". Since this time our faculty have published several peer-reviewed journal articles and also presented a number of papers at national conferences.

- The number of majors has been a point of contention in the past and will probably remain as one in the future. How majors are counted within the present system is more for the traditional full-time on-campus students. Most all of the students within the Technical Education department are part-time off-campus students. Even if they do not take three consecutive semesters of PSU courses, they are still degree seeking.

- A question from the previous review was why technical teacher education is located in the College of Technology and not the College of Education. There are multiple reasons for this location. Kansas is an alternative certification state for their Trade and Industrial teachers. This means that these teachers are hired for their skills and knowledge within their technical area (a bachelors in education is not required for employment), and it is the mission of our department to help them make the transition to teaching that content area. Another reason for the location of this department in the College of Technology is that this college better represents the TED students as a whole. For instance, there is a two year and four year automotive program within this college and some of our students will be teaching in the automotive area. Students within the TED department teach in programs such as Building Trades, Automotive Repair, Auto Body, Heating and Air Conditioning, Aviation Technology, Cabinet Making, Civil Engineering Technology, Computer Aided Drafting, Diesel Technology, Electrical Trades, Environmental Water Technology, Machine Shop Technology, Masonry/Bricklaying, and Welding. These programs all have a strong relationship with the College of Technology.

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.

Vision Statement:

The Department of Technical Education will be recognized as the leading institution of higher education in the State of Kansas for providing technical education teacher certification, graduate degrees in human resource development and technical teacher education, undergraduate degrees in technology management, and persons prepared with an emphasis in safety.

GOAL 3: Provide support services to other University departments and area business and industry.

Objective 3.1 Develop soft skills areas of materials for presentation capabilities for workshops, seminars, course assistance, and other areas of specialization to assist other faculty, community business and industry, State Department of Commerce and Housing, and the Business and Technology Institute in workforce preparation skill development.

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

No.	Course	Type of Faculty **T** = Tenure Track **GA** = Grad. Asst. **O** = Other Note % of sections taught by each.	Enrollment trend (3 yrs) **++ = >25% inc.** **+** = 10-25% inc. **"="** = w/in ±10% **-** = 10-25% decr. **--** = >25 decr.	When Scheduled **F** = Fall **S** = Spring **R**= Summer	Type of Course **R** = Required **E** = Elective **C** = Cognate/ Support **CAP** = Capstone/ Assessment	Rationale **(Why course?)**
1.	TTED 606 Industrial Supervision	**T**	**+**	**FSR**	**C**	Support course
2.	TTED 680 Classroom Management for Vocational Education	**T**	**=**	**FSR**	**C**	Support course and certification requirement
3.	TTED 698 School Improvement Processes in Career and Technical Education	**T**	**FIRST TIME OFFERED**	**FSR**	**C**	Support course and certification requirement
4.	TTED 731 Adult Learner	**T**	**++**	**FSR**	**C**	Support course
5.	TTED 845 Instructional System Design	**T**	**=**	**FSR**	**R**	Core course and certification requirement
6.	HRD 775 Instructional Technology	**T**	**=**	**FS**	**C**	Support course
7.	TTED 779 Instructional Methods for Technical Education	**T**	**=**	**FS**	**R**	Core course and certification requirement
8.	TTED 785 Video Lesson Development	**T**	**=**	**S**	**C**	Support course
9.	TTED 790 Occupational Analysis	**T**	**=**	**F**	**C**	Support course
10.	TTED 801 Organization and Administration of Vocational Education	**T**	**=**	**S**	**C**	Support course
11.	TTED 804 Supervisory Techniques	**T**	**=**	**S**	**C**	Support course
12.	TTED 805 Special Problem	**T**	**=**	**FSR**	**C**	Research or Special Interest course
13.	TTED 808 Cooperative Education	**T**	**=**	**S**	**R**	Core course and certification requirement
14.	TTED 810 Seminar	**T**	**=**	**FSR**	**C**	Support course
15.	TTED 819 Planning Facilities for Vocational Education	**T**	**=**	**S**	**C**	Support course

16.	EST 820 Hazardous Materials Handling	**T**	=		**E**	Elective course
17.	EST 821 Industrial Pollution	**T**	=	**FS**	**E**	Elective course
18.	EST 822 Accident Causation and Prevention	**T**	=	**FS**	**E**	Elective course
19.	EST 823 Industrial Hygiene and Toxicology	**T**	=		**E**	Elective course
20.	EST 825 Industrial Ergonomics	**T**	=	**FS**	**E**	Elective course
21.	EST 827 Safety Issues and Transportation	**T**	=	**F**	**E**	Elective course
22.	EST 828 Fire Prevention	**T**	=	**S**	**E**	Elective course
23.	EST 829 Environmental Health and Safety	**T**	=	**FS**	**E**	Elective course
24.	TTED 832 Needs Assessment	**T**	+	**FS**	**C**	Research course
25.	TTED 875 Instructional Materials for Technical Teachers	**T**	=	**S**	**C**	Support course
26.	TTED 887 Data Analysis and Interpretation in Technology	**T**	=	**S**	**C**	Research course
27.	TTED 890 Research and Thesis	**T**	-	**FSR**	**C**	Research course
28.	TTED 891 Methods of Research	**T**	+	**FS**	**R**	Core course and research course
29.	TTED 893 Performance Evaluation	**T**	=		**R**	Core course and certification requirement
30.	TTED 894 History and Philosophy of Vocational Education	**T**	=	**FSR**	**R**	Core course and certification requirement
31.	TTED 897 Teaching Special Vocational Students	**T**	=	**FSR**	**R**	Core course and certification requirement
32.	TTED 898 Computer Generated Multimedia	**T**	=	**S**	**E**	Support course

6. Support Course Information - Courses Offered by Other Departments

No.	Course No.	Course	Rationale (Why course?)	Comments (Critique)
1.	SSLS 824	Education Statistics I	Statistical analysis for research component of program	
2		Methods of Research from KSU, ESU, FHSU, WSU, or KU	Core requirement for Masters degree	

7. Sequence of Courses in Major

Sequence of Courses	Rationale for Sequence
TTED 779 – Instructional Methods for Technical Education	Provides opportunity for teachers to develop their presentation skills in a variety of settings.
TTED 845 – Instructional System Design and Curriculum Development	Enables teachers to use, revise and develop curriculum for their career and technical program
TTED 680 - Classroom Management in Vocational Education	Assists teachers in developing effective classroom management skills
TTED 897 - Teaching Special Vocational Students	Prepares teachers to work with special needs students
TTED 893 Performance Evaluation	Assists teachers in developing validity and reliable student assessments
TTED 697 – Using Technology as an Instructional Tool	Aids the teacher in the development of skills for using technology in the classroom
TTED 808 - Cooperative Education	Assists the teacher in developing on-the-job educational programs.
TTED 894 - History & Philosophy of Vocational Education	Aids the teacher in developing their own philosophy about vocational education and provides the historical reference from where vocational/technical education has developed from
TTED 698 - School Improvement Processes in Career and Technical Education	Prepares teachers to evaluate and improve the career and technical program they are currently teaching in.

8. Admission Requirements to Program

Requirements	Justification for Requirements
Bachelors degree in technical area or related area required.	It is necessary that graduate students have a very sound foundation in the area that they are teaching in. With this background, it enables them to build their teaching skills within this technical area.
University graduate school admission requirements must be met.	Conditional admission based on marginal undergraduate GPA occurs on an infrequent basis with the stipulation that students achieve a B average in the first 12 hours of coursework. Often this situation is found with adult students who in their early college experience were not committed to their studies. Very few of these individuals have had trouble with graduate courses.
Admission to candidacy after successfully completing 12-15 hours of coursework.	Students must demonstrate they are capable of maintaining the necessary GPA to continue in the program. It also defines the exact coursework remaining in the program.

9. Program Advisement

a. Advisement Model Used:

Graduate faculty in the department with technical teacher experience and who teach TED courses are assigned master level TED candidates by the department chair, based upon their present advisement load, course teaching load, and other research or service responsibilities. Occasionally degree candidates will change advisors so that their career goals better match the research or TED experience of their advisor. Such changes must be approved by the department chair.

b. Training Preparation of Advisors:

New faculty members are given limited numbers of advisees, allowing them more time to spend with each advisee. They are provided assistance by the department chair and other faculty within the department.

c. Advisement Link to Faculty Appraisal:

It is the responsibility of all faculty to advise students. Faculty members within the Technical Education department list this as a criterion for evaluation as a part of the teaching area.

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

	Evidence of Quality	Yes or No	Description	Results
a.	Graduate Comprehensive Instrument	Yes	Comprehensive exams of selected courses that they have taken	This gives the departmental faculty the feedback that they need from students to demonstrate the education they have received, retained and are able to apply.
b.	Evidence of Impact of Assessment/Comprehensives on the Curriculum/Program	Yes	State assessment of the coursework.	KSDE and BOR provides the department with input regarding their observation and evaluation of coursework to prepare vocational technical teachers
			ATS directors and presidents receive input from their instructors about course content	These directors and presidents provide information as to the needs they have identified for their vocational/technical teachers.
c.	Student Course Evaluations	Yes	SPTE course evaluations	Provide instructors with input from students as to how they see the strengths and weaknesses of the instructor.
d.	Graduate Satisfaction Survey	Yes	Exit interviews with students	This provides the opportunity for feedback from students as to where changes need to be made within the program, from a student's standpoint
e.	Employer Satisfaction Survey	Yes	Administrators provide feedback as to the satisfaction level of graduates	This provides an opportunity to obtain information from administrators about the recent graduates and how they are performing in the classroom and laboratories.
f.	Advisory Council Input	Yes	ATS directors and presidents provide input as to course offerings.	Needed changes are implemented as deemed necessary.
g.	Departmental Process for Course/Program Revision(s)	Yes	Departmental Curriculum Committee	Committee reviews course offerings and make sure that these align with KSDE and BOR recommendations and also review courses for content to ensure these are updated as needed.
h.	Advisement	Yes	Program guide that is used as a checklist both by students and advisor	This tool allows for students to help plan their coursework. Both the advisor and student realize where the student is at within their degree
i.	Tentative Five Year Plan	Yes	Courses that are tentatively plan over a five year period	This tool has helped students to be able to map out both certification courses and degree courses and how they are best to take these in the time they need to take them.

11. Program Summary

	Narrative
a. Strengths	
1. Future planning	Implemented the use of a tentative five year schedule of courses that are offered both on and off-campus, so that students can better plan on meeting both degree and certification requirements. This also assisted students in developing their certification plan where they have to indicate to the state department how they are going to meet the certification requirements.
2. Advising and degree completion	Work closely with the student interested in completing a masters' degree. This is a challenge since some of their graduate coursework will be completed at another university.
3. Course development	Work closely with the KSDE certification office in adding new courses to meet the new certification requirements. These classes include TTED 680 Classroom Management in Vocational Education, TTED 698 School Improvement Process in Vocational Education and TTED 697 Using Technology as an Instructional Tool.
4. Course delivery	Teach courses in a variety of formats, but trying to maintain the needed face-to-face contact with students. Our current method is 1 weekends for each credit hour of course worrk and one complete week for the New Teacher Workshop. Instructors within the department are continuing to use technology to deliver courses in a mediated format.
5. Competency assessment	Moved the competency assessment for new teachers from the spring time to the fall. Then moved this from the fall to the late summer. This will ensure that newly hired instructors can take the competency examination prior to the start of school.
6. Needs assessment	Continue to work with the KSDE and BOR so that we can improve on our methods of meeting vocational and technical teachers needs within the State of Kansas. Open communications with ATS directors, ATC and Community College presidents and state department personnel.
7. Degree opportunities	The BOR is asking all post-secondary school in the State of Kansas to work towards NCA accreditation. Because of this, interest in degree orientation has increased. No longer are student just interested in the certification requirements, they are interested in a degree as well.
8. National Recognition	National recognition of faculty members in the areas of research and the instructional preparation of vocational instructors.
b. Weakness	
1. Missed opportunity	Demand for our off-campus courses continues to grow, but with the limited resources in faculty, less can be done for the off-campus students.
2. Delivery system	Lack of affordable interactive distances learning systems to meet all the instructional needs at the various sites within the State of Kansas
c. Plans for Improvement	
1. Increasing faculty numbers	Look at increasing faculty member numbers, which may include qualified adjunct faculty
2. Delivery of courses	Continue to investigate the use of IDL and mediated instruction. In addition to this item the use of courses where material is partially mediated.
3. Recruitment	Continue to visit the different secondary and postsecondary schools and visit with teachers about the degree opportunities available in the TED department.
4. Advisement	Continue to advisement through site visits at the area technical schools, area technical colleges, community colleges and state meetings.