Section IV: Evidence for Meeting Standards
Assessment 2: Grades as a Course-Based Content Assessment

1. Description and Use of Assessment:

Content Core for Technology Education at Rhode Island College:

TECH 200 Introduction to Technological Systems
TECH 202 Design in Technology Education
**MGT 203 Computer-Aided Design and Drafting (CADD) I / TECH 216 Computer Aided Design
TECH 204 Energy and Control Systems
TECH 205 Production Processes
TECH 300 Orientation to Technology Education
TECH 310 Historic Innovation and Invention
TECH 326 Communication Systems
TECH 327 Construction Systems
TECH 328 Manufacturing Systems
TECH 329 Transportation Systems

**MGT 203 Computer-Aided Design and Drafting (CADD) I is a "Taught with" class. Technology Education candidates receive credit for TECH 216 Computer Aided Design.

These courses constitute the content core of the program. Each class is required for completion of a degree in the Technology Education program and they are required for initial certification by the Rhode Island Department of Education. The classes are carefully aligned with the Standards for Technological Literacy (STL). A Technology Education candidate's plan of study includes courses in Communication, Construction, Manufacturing, and Transportation/Energy systems and their associated processes. The program provides candidates with the opportunity to learn about the technological processes and the knowledge needed to solve problems and extend human capabilities in an ever-changing technological environment. The program is designed to provide teacher candidates with design and problem solving skills, appropriate and safe tool and machine skills, and teaching/learning approaches necessary to teach and prepare their students to become technologically literate. There is a strong emphasis on the relationships between technological content and the design process. Guided by the Standards for Technological Literacy, teacher candidates in Technology Education grow to understand the major concepts and ideas for the study of technology. Simultaneously, candidates will learn the craft of teaching through a well-informed series of professional classes. These classes provide a cohesive blend of opportunities for observation, reflection, and practice in a variety of Technology Education classrooms.

Part 2. *Alignment with SPA standards.*

The matrix below is provided to define the relationship/alignment between the TEEA/CTTE Standards and course work candidates take to acquire their degree and certification in Technology Education. The program assessment is also included here.

ITEEA/CTTE Standard	Program Assessment
1. **The Nature of Technology.** Technology teacher education program candidates develop an understanding of the nature of technology within the context of the Designed World. ***Aligns with RIC Courses:*** TECH 200 Introduction to Technological Systems; TECH 202 Design in Technology Education; TECH 300 Orientation to Technology Education	Content Portfolio Grades & Program GPA Exit Interview

2. **Technology and Society.** Technology teacher education program candidates develop an understanding of technology and society within the context of the Designed World. ***Aligns with*** ***RIC Courses:*** TECH 200 Introduction to Technological Systems; TECH 300 Orientation to Technology Education; TECH 310 Historic Innovation and Invention; TECH 326 Communication Systems; TECH 327 Construction Systems; TECH 328 Manufacturing Systems; TECH 329 Transportation Systems	Content Portfolio Grades & Program GPA Exit Interview
3. **Design.** Technology teacher education program candidates develop an understanding of design within the context of the Designed World. ***Aligns with*** ***RIC Courses:*** TECH 202 Design in Technology Education; TECH 204 Energy and Control Systems; TECH 205 Production Processes; TECH 216 Computer Aided Design; TECH 326 Communication Systems; TECH 327 Construction Systems; TECH 328 Manufacturing Systems; TECH 329 Transportation Systems	Content Portfolio Grades & Program GPA Exit Interview
4. **Abilities for a Technological World.** Technology teacher education program candidates develop abilities for a technological world within the context of the Designed World. ***Aligns with*** ***RIC Courses:*** TECH 202 Design in Technology Education; TECH 204 Energy and Control Systems; TECH 205 Production Processes; TECH 216 Computer Aided Design; TECH 326 Communication Systems; TECH 327 Construction Systems; TECH 328 Manufacturing Systems; TECH 329 Transportation Systems	Content Portfolio Grades & Program GPA Exit Interview
5. **The Designed World.** Technology teacher education program candidates develop an understanding of the Designed World. ***Aligns with*** ***RIC Courses:*** TECH 200 Introduction to Technological Systems; TECH 202 Design in Technology Education; TECH 216 Computer Aided Design; TECH 204 Energy and Control Systems; TECH 205 Production Processes; TECH 300 Orientation to Technology Education; TECH 310 Historic Innovation and Invention; TECH 326 Communication Systems; TECH 327 Construction Systems; TECH 328 Manufacturing Systems; TECH 329 Transportation Systems	Content Portfolio Grades & Program GPA Exit Interview

Part 3. *Grade Policy and Minimum Expectation.*

Letter Grade /Grade Points Per Credit Hour	Letter Grade /Grade Points Per Credit Hour
A (excellent) 4.00	C (satisfactory) 2.00
A- 3.67	C- 1.67
B+ 3.33	D+ 1.33
B (good) 3.00	D (low pass) 1.00
B- 2.67	D- 0.67
C+ 2.33	F* (failure) 0.00

The program expectation is that all candidates will maintain a minimum Cumulative GPA of 2.5 and a Technology Education program GPA of 2.75. Candidates are encouraged a achieve a minimum of B or better in all content courses in order to maintain

Content Knowledge

Grades for Completers

Technology Education candidates at Rhode Island College undergo a series of grade and GPA reviews as they approach program gateways. All candidates must maintain a minimum GPA of 2.75 in the Technology Education Major and a cumulative GPA of 2.5. This process has been made easier due to the implementation of the Universal Advising System for all candidates. Candidates must meet with their advisors before they can register for courses in the following semester. The Technology Education advising sheet (attachment) is used to help candidates plan their course of study, but also allows them to track their performance. Candidates who enter RIC with an inclination to become a Technology Education teacher are first assigned advising through OASIS; they are designated as TE-IM. Getting a Technology Education Intended Major (TE-IM) off to a good start is very important, so the Technology Education program advisor and the Office of Academic Support and Information Services (OASIS) work closely to jointly advise candidates. This process can be somewhat unwieldy because candidates are often steered to take a full schedule of Gen Ed courses and other college requirements before beginning their Technology Education course work. We have worked out a system where a TE-IM, when identified, will meet with the Technology Education program coordinator to discuss a plan of study, the program requirements, and future course schedules. We also work closely with OASIS to assist incoming transfer students and second-degree candidates who plan to do Technology Education course work.

The first gateway is at admission to the Feinstein School of Education and Human Development (FSEHD). In order to be admitted to the FSEHD and the Technology Education program, candidates must prepare an admissions portfolio. Within the FSEHD Admissions Portfolio are a number of requirements that demonstrate a candidate's early mastery of Technology Education content (TECH ED GPA), Elective, Cognate, and General Education requirements (CUM GPA), issues related to teaching in diverse learning situations (FNED 346 GRADE), Basic Skills (PPST SCORES), and Technological Competency (TECH COMP).

Candidates must have earned a minimum of 12 credits in the content area and a total of 24 credits before submitting an Admissions Portfolio for consideration by FSEHD. At the admissions point, the candidate must have a 2.75 GPA in Technology Education courses and a minimum overall GPA of 2.5. If these GPAs and the other admissions requirements are not met, the student will be notified by letter that admission will not be granted until the deficiencies are corrected. Once the requirements are met, the candidate will then resubmit documentation for review by the content area coordinator and Associate Dean of the FSEHD.

The FNED 346 grade is an important measure of a candidate's disposition toward teaching and working with diverse student populations. The FNED disposition forms are attached. The course instructor and teacher whose classroom was visited by our candidates provide important information regarding candidates' abilities and dispositions.

The tables below provide a breakdown of where Technology Education program completers stood at a particular gateway. The gateways are as follows:

Gateway 1: Admission to Feinstein School and Technology Education Program;
Gateway 2: Admission to TECH 406 Methods in Technology Education;
Gateway 3: Admission to TECH 407 Practicum in Elementary Education (k – 6);
Gateway 4: Admission to TECH 408 Practicum in Secondary Technology Education 7 – 12;
Gateway 5: Admission to TECH 421 Student Teaching in Technology Education.

Gateway 1:

Admission to Feinstein School and Technology Education Program

Student	Academic Year	FNED 346 GRADE	TECH ED GPA	CUM. GPA	PPST READING	PPST WRITING	PPST MATH	TECH COMP SCORE
	2007 - 2008							
1		4.0	4.0	4.00	187	183	182	S
2		4.0	4.0	4.0	182	172	180	S
	2008 -2009							
1		4.0	3.5	2.94	181	172	176	S
2		3.0	3.17	2.80	182	182	177	S
	2009 - 2010							
1		3.67	3.28	3.29	183	171	183	S
2		4.0	3.23	2.87	177	172	177	S

A 4.00, A- 3.67, B+ 3.33, B 3.00, B- 2.67, C+ 2.33, C 2.00, C- 1.67, D+ 1.33, D 1.00, D- 0.67, F 0.00

Gateway 2:
Admission to TECH 406 Methods in Technology Education

Student	Academic Year	TECH ED GPA	CUM. GPA	CEP GRADE
	2007 - 2008			
1		4.0	4.0	4.0
2		4.0	4.0	4.0
	2008 -2009			
1		3.57	2.94	3.33
2		3.24	2.87	3.0
	2009 - 2010			
1		3.26	3.24	3.0
2		3.23	2.87	3.0

The CEP 315: Counseling and Educational Psychology grade is included here because it was the course candidates took before admission to the FSEHD and the Technology Education program. The admission sequence was modified so that FNED 346 is now used for admission point. CEP 315 was monitored to be sure that candidates achieved a C or better.

Gateway 3:
Admission to TECH 407 Practicum in Elementary Education (k – 6)

Student	Academic Year	TECH ED GPA	CUM. GPA	TECH 406 GRADE
	2007 - 2008			
1		4.0	4.0	4.0
2		4.0	4.0	4.0
	2008 -2009			
1		3.48	3.05	3.0
2		3.28	2.95	3.0
	2009 - 2010			
1		3.28	3.29	3.33
2		3.31	2.89	3.33

SPED 433: Adaptation of Instruction for Inclusive Education is usually taken with TECH 407 and should be

completed by the end of the TECH 408. We encourage candidates to take it concurrently with the Elementary Practicum to ensure that they are prepared for the PLT exam. SPED 433: Adaptation of Instruction for Inclusive Education requires a minimum of grade of B- in TECH 406 Methods in Technology Education for admission to that class. Lesson plans created in TECH 406 are adapted to accommodate people with diverse learning needs. The primary requirement, development of a comprehensive, differentiated unit of instruction, incorporates the teaching, learning, and assessment strategies taught and learned in this course.

Gateway 4:
Admission to TECH 408 Practicum in Secondary Technology Education 7 - 12

Student	Academic Year	TECH ED GPA	CUM. GPA	TECH 407 GRADE	SPED 433 GRADE
	2007 - 2008				
1		4.0	4.0	4.0	4.0
2		3.7	3.84	3.67	4.0
	2008 -2009				
1		3.43	3.09	3.0	3.0
2		3.21	3.04	3.0	3.33
	2009 - 2010				
1		3.53	3.37	3.67	3.33
2		3.34	2.96	3.33	3.33

During the semester that candidates take TECH 408 Practicum in Secondary Technology Education 7 – 12, we expect them to take and pass the PLT exam. As with the other programs in FSEHD, candidates who do not pass the exam are not allowed to go forward to Student Teaching. Candidates who do not pass are counseled and offered study assistance through the Dean's Office and OASIS. Topics such as test taking skills, and especially time management are reviewed. The Technology Education program and the Office of Partnerships and Placements review the candidate's application for admission to TECH 421 Student Teaching in Technology Education. Candidates must have all program requirements completed, maintain satisfactory GPAs, present a satisfactory Preparing to Teach Portfolio, and pass the PLT exam to be recommended for student teaching. During the semester before student teaching, candidates register for graduation. They request a graduation audit that is used to compare with the program plan of study to ensure all requirements are completed.

Gateway 5:
Admission to TECH 421 Student Teaching in Technology Education.

Student	Academic Year	TECH ED GPA	CUM. GPA	PLT SCORE	P2T* Recommendation
	2007 - 2008				
1		4.0	4.0	183	Approved
2		3.78	3.85	172	Approved
	2008 -2009				
1		3.43	3.2	171	Approved
2		3.29	3.07	176	Approved
	2009 - 2010				
1		3.33	3.37	170	Approved
2		3.34	2.93	181	Approved

*Preparing to Teach Portfolio Recommendation

Part 4. *Data Table of Grades for Content Courses during Collection Period*

B.S. in Technology Education All Candidates' Grades For Required Coursework												
Course	**Fall 2007**		**Spring 2008**		**Fall 2008**		**Spring 2009**		**Fall 2009**		**Spring 20010**	
	Course Avg. & Range	**% Candids. Meeting Minimum**	**Course Avg. & Range**	**% Candids. Meeting Minimum**	**Course Avg. & Range**	**% Candids. Meeting Minimum**	**Course Avg. & Range**	**% Candid. Meeting Minimum**	**Course Avg. & Range**	**% Candid. Meeting Minimum**	**Course Avg. & Range**	**% Candids. Meeting Minimum**
TECH 200	3.28 0.00 – 4.00	n = 14 93%	**XX**	**XX**	4.00	n = 8 100%	**XX**	**XX**	3.04 2.67 – 4.00	n = 9 100%	**XX**	**XX**
TECH 202	2.80 0.00 – 4.00	n =12 75%	**XX**	**XX**	**XX**	**XX**	3.73 3.00 – 4.00	n = 14 100%	**XX**	**XX**	2.33 0.00 – 3.00	n = 7 85%
TECH 204	**XX**	**XX**	**XX**	**XX**	**XX**	**XX**	3.58 2.67 – 4.00	n = 12 100%	**XX**	**XX**	**XX**	**XX**
TECH 205	**XX**	**XX**	3.11 3.67 – 1.67	n = 9 88%	**XX**	**XX**	**XX**	**XX**	**XX**	**XX**	2.51 0.67 – 4.00	n = 11 72%
TECH 300	**XX**	**XX**	3.41 2.67 – 4.00	n = 9 100%	**XX**	**XX**	**XX**	**XX**	**XX**	**XX**	3.00 0.00 – 4.00	n = 9 88%
TECH 310	**XX**	**XX**	3.34 1.00 – 3.67	n = 9 88%	**XX**	**XX**	**XX**	**XX**	**XX**	**XX**	**XX**	**XX**
TECH 326	**XX**	**XX**	**XX**	**XX**	**XX**	**XX**	**XX**	**XX**	3.27 1.33 – 4.00	n = 12 91%	**XX**	**XX**
TECH 327	**XX**	**XX**	**XX**	**XX**	**XX**	**XX**	3.30 2.67 – 4.00	n = 9 100%	**XX**	**XX**	**XX**	**XX**
TECH 328	**XX**	**XX**	**XX**	**XX**	3.79 3.30 – 4.00	n = 14 100%	**XX**	**XX**	**XX**	**XX**	**XX**	**XX**
TECH 329	**XX**	**XX**	**XX**	**XX**	**XX**	**XX**	**XX**	**XX**	2.85 0.00 – 4.00	n = 16 88%	**XX**	**XX**
MGT 203	3.77 (4.0 – 3.33)	n = 3 100%	**XX**	**XX**	**XX**	**XX**	**XX**	**XX**	2.89 1.33 – 4.0	n = 10 60%	4.0	n = 1 100%
Semester GPA	**3.28**	**N = 29 89%**	**3.28**	**N = 27 92%**	**3.89**	**N = 22 100%**	**3.53**	**N = 35 100%**	**3.01**	**N = 37 84.75%**	**2.96**	**N = 28 86.25**

Grades from Content Courses:
Candidates' grades presented here positively reflect the commitment of the candidates and instructors to maintain high standards in the program. With few exceptions, candidates have kept their GPAs at B or better. Many of our candidates are first generation college candidates who have worked hard to keep their grades up to standard, yet need to find a balance between school and work. The cumulative GPAs from each semester reveal that candidates have a keen interest in the subject matter taught in their classes. The individual GPAs will be calculated for each candidate as the approach the program gateways. It is hopeful that the group represented here remains a strong class of Technology Education Teacher candidates.

Part 5. *A brief analysis of the data finding:*

Overall Grade Performance:
The data reveal that the candidates enrolled in the Technology Education Program meet program requirements at every Gateway; and before admission they are establishing excellent groundwork to prove that they are mastering Technology Education content. The relatively small size of the program makes it easy to identify candidates who are having problems with course work. The mandatory Universal Advising system is also helpful ensuring that candidates are meeting the college and program requirements.

The tight alignment of course work to the Standards for Technological Literacy allows course instructors to ensure that standards are met in an overt fashion, and that candidates achieve good results from their projects and other course requirements. Syllabi for all classes outline the standards achieved as a result of participation in the content classes.

The last two semesters merit some mention. During the fiscal crisis in Rhode Island, I learned that most of our candidates are working more hours or at more than one job outside of school. I would suggest that this alone has caused a small dip in the semester GPAs as calculated in the table above.