Program Report for the
Preparation of Educational Technology Facilitators
(Initial Endorsement)

International Society for Technology in Education (ISTE)

NATIONAL COUNCIL FOR ACCREDITATION OF TEACHER EDUCATION

C O V E R   S H E E T

Institution – Southeastern Louisiana University   **State - LA**

Date submitted_____

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Program documented in this report:
>**Name of institution's program M.Ed. – Educational Technology Leadership**_____
>**Grade levels for which candidates are being prepared K-12**_____
>**Degree or award level Master of Education**_____
>**Is this program offered at more than one site? ☐ Yes   X No**
>   If yes, list the sites at which the program is offered_____
>_____
>**Title of the state license for which candidates are prepared**
>_____

Program report status:
>   **Initial Review**
> **X   Response to a Not Recognized Decision**
>   **Response to National Recognition With Conditions**

State licensure requirement for national recognition:
NCATE requires 80% of the program completers who have taken the test to pass the applicable state licensure test for the content field, if the state has a testing requirement. Test information and data must be reported in Section III. Does your state require such a test?
>   ☐ **Yes**   **X No**

Educational Technology Facilitator

Section I: Context

Two major events are of concern with the presentation of this information:

1. Fall 2007 is the first semester for this redesigned and newly named M.Ed. program. The Educational Technology Leadership Masters Degree program is a graduate program housed in the College of Education and Human Development. This program replaces the Master of Education in Administration and Supervision with a concentration in Educational Technology Leadership. All students were transferred into the new degree program. There was a period of 7 months when no students were admitted into either program.
2. Southeastern Louisiana University is in a Hurricane Katrina affected area.

These two significant events determine the need for a completely reconsidered SPA report (rather than presenting revised only sections) and account for the small amount of data for the 2006-2007 reporting year. It is expected that as the hurricane affected area returns to normal and as students are able to continuously apply for admission to the new degree program that student enrollment numbers will increase. Because the program does not currently enjoy large enrollment numbers (with an average of less than 30 enrolled students), not all courses are taught every semester.

Candidates entering the Educational Technology Leadership program are expected to have basic computer skills to include the following: word processing, graphics, a general knowledge of internet navigation and electronic mail. Students are expected to posses the general skills and proficiency in most of the NETS-T and NETS-S standards before entering the program. These skills that support technology use in instructional settings are almost always acquired through successful completion of undergraduate coursework, or through participation in the of the Louisiana INTECH training program available to all teachers in Louisiana or a demonstration of skill through coursework or activity focused on use of technology in the classroom is required. For those students not in possession of NETS-T and NETS-S attributes, additional coursework is required to acquire these skills and instructional strategies. These courses include a basic course for computer skills and a course focused on integrating technology into educational settings.

Candidates who enroll in this degree program are often technology leaders in their own schools. As part of this program, students build and test technological processes, products and services that are ready for operational use in educational and training settings. This program aligns with ISTE standards and state of Louisiana standards to satisfy two Louisiana certifications - Educational Technology Facilitator and Educational Technology Leader. Candidates generally are teachers from local public and private school and are almost exclusively full time teachers, completing the program on a part time basis over the course of 2 to 3 years.

The M.Ed. in Technology Leadership consists of 10 required courses and 2 electives courses.   Both levels of certification are add-on certifications and require candidates to posses a teaching certificate for entrance to the program.

Completion of a masters program of study **is not required** for Educational Technology Facilitator certification in Louisiana. The state of Louisiana has determined that **3 graduate level courses (9 hours) are sufficient to prepare teachers as technology facilitators.** The following 9 hours of coursework are required for students to be awarded the add-on certification of Educational Technology Facilitator:

ETEC 644 - Design and Development of Multimedia Instructional Units (3 hours)
ETEC 650 - Educational Telecommunications, Networks, and the Internet (3 hours)
ETEC 660 - Technology Leadership in Schools (3 hours)

In addition to completion of a Masters degree, 21 hours of coursework are required for students to be certified as Educational Technology Leaders:

ETEC 644 - Design and Development of Multimedia Instructional Units (3 hours)
ETEC 650 - Educational Telecommunications, Networks, and the Internet (3 hours)
ETEC 660 - Technology Leadership in Schools (3 hours)
ETEC 630 - Technology Planning and Administration (3 hours)
ETEC 665 - Professional Development for K-12 Technology Integration (3 hours)
ETEC 695 - Educational Technology Research, Evaluation, and Assessment (3 hours)
ETEC 645 - Advanced Telecommunications and Distance Education (3 hours)

Please see the attached outline for Louisiana add-on Technology certifications. Also please see attached curriculum sheet for M.Ed in Technology Leadership degree requirements.

Admission to the program:

Student Admission Procedure:

Candidates entering the Educational Technology Leadership program are expected to have basic computer skills to include the following: word processing, graphics, a general knowledge of internet navigation and electronic mail.   Students are expected to posses the general skills and proficiency in most of the NETS-T standards before entering the program. These skills that support technology use in instructional settings are almost always acquired through successful completion of the Louisiana INTECH training program available to all teachers in Louisiana. For those students not completing the Louisiana INTECH program, a demonstration of skill through coursework or activity focused on use of technology in the classroom is required. Additionally, students must complete the following screening and selection process:

1. Submit a formal application to the graduate school and a letter of introduction that identifies the candidate and his/her purpose in applying to the program
2. Submit a current resume and cover letter with rationale for requesting admission into the Educational Technology Leadership program
3. Submit an electronic portfolio (CD-ROM) with various digital artifacts for assessment purposes
4. Complete a comprehensive survey for assessment of technology knowledge, skills and dispositions
5. Participate in a formal assessment interview with the Educational Technology Leadership faculty
6. Submit scores from the Verbal and Quantitative portions of the Graduate Record Exam
7. Hold a valid teaching certificate.

Student Retention: A student must complete, with a 3.0 or better average, all courses required for the certification.

Graduation Requirements: Students must complete coursework with a 3.0 or better average. Students must also establish and maintain an electronic portfolio of work that demonstrates technology leadership skills, competencies and dispositions through products and reflection. The culminating exit event is a successful defense of this portfolio by the student to a group of professors that teach the required coursework for this program.

Field Based Activities:

Students field test a variety of projects and products that are developed as part of each of the 3 courses that comprise this add-on certification program. Field-based activities are defined as the process and product that result from the application in the workplace environment of the strategic, instructional organizational and contextual leadership program standards. When coupled with integrating experiences through related lab experiences and/or seminars, the outcome is synthesis of knowledge and skills useful to practicing school technology leaders.

Four of the 7 projects listed as program assessments require the students to field test their work in their in teaching settings. These projects include the 1) School or Classroom Website, 2) Educational Software Project, 3) Technology Plan Project, and 4) Action Research Project. Program faculty have worked collaboratively with local school district personnel, including individual schools, to involve candidates in a variety of settings and permit them to engage in activities of varying complexity. At the graduate level, teachers enrolled in this program will use their own school settings for field-based activities; therefore the amount of field activity varies by student and activity.

Relationship between Educational Technology Leadership Program and Conceptual Framework of the College of Education and Human Development:

In order to successfully plan, develop, and implement curricula to meet the needs of diverse learners in today's world and to prepare students for the future, the College of Education and Human Development (COEHD) has identified four critical components of The Effective Educator: standards-based instruction, knowledge of the learner, best pedagogical practices, and content knowledge. The Educational Technology Leadership program is standards based and satisfies the ISTE based certification requirements for Educational Technology Facilitator and Educational Technology Leader in the state of Louisiana. Each course in the Educational Technology Leadership program classifies course objectives with regard to the critical components of the Effective Educator Conceptual Framework of the College. These critical components are discussed below:

Knowledge of the Learner – The Educational Technology Facilitator curriculum prepares candidates to demonstrate and value sensitivity to the needs of all learners. Candidates acquire an understanding of learners as individuals and incorporate this knowledge as they develop the various products and projects required by the program. As effective professionals, they continue that practice throughout their careers. Diverse settings for practice reflect the diverse settings of each student in the program. Technology is the focus of this program, and as such it is integrated into every aspect of this curriculum.

Strategies and Methods –The effective Educational Technology Facilitator demonstrates best practices through inquiry, creativity and reflective thinking.   This project-based curriculum requires students to create and test strategies and methods to develop best practices for technology use in the classroom. This problem-solving process requires the student to consider and integrate complex information. Diverse settings for practice reflect the diverse settings of each student in the program. Technology is the focus of this program, and as such it is integrated into every aspect of this curriculum.

Content Knowledge – Educational Technology Facilitator students exhibit depth of knowledge in technology use and the use of technology for learning. They also develop an understanding of the how to facilitate the use of technology among those teachers they will serve as part of their designated role in the school. Diverse settings for practice reflect the diverse settings of each student in the program. Technology is the focus of this program, and as such it is integrated into every aspect of this curriculum.

Professional Standards –   The Educational Technology Facilitator curriculum is based on professional standards, enabling students to develop knowledge, skills and dispositions to become effective technology facilitators. Course objectives and learner outcomes are aligned with national ISTE standards, state certification standards and institutional standards. Students incorporate these professional standards as they develop and implement projects for guided practice while at the university and through this guided practice develop strategies to inform professional practice. Diverse settings for

practice reflect the diverse settings of each student in the program. Technology is the focus of this program, and as such it is integrated into every aspect of this curriculum.

Additionally, because this is an advanced degree program that offers add-on certifications, the program is project based. The philosophy of the Educational Technology Leadership Masters program embraces the notion that students must continue to work with projects until they are satisfactory, which mirrors work in the real world. Therefore, projects are developed with continual oversight of the faculty member which results in multiple revisions by the student while the project is under development. This revision cycle allows the student to work with the project until it is considered acceptable or exemplary. The act of revising a project until it is considered acceptable is considered to be of more value to the student than devising an assessment instrument that would return a range of scores. Ideally, all students would develop exemplary products and understand that a project is not finished until it is at least in good working order and satisfies the task.

Relationship between the Program's assessment to the Unit's assessment:

The Unit assessment system of the College of Education and Human Development is PASS-PORT. This system not only permits assessment of candidates and their progress through their academic program, it also permits program and unit assessment. The Department of Educational Leadership and Technology uses this system for all of its academic program assessment. The Educational Technology Leadership program is a project-based curriculum that is evidenced by work products and reflections that are collected in an ongoing electronic portfolio.

The artifacts listed in the chart below for inclusion in the portfolio represent the minimum requirements for submission. Students are advised to include any additional personal or professional products that may serve to demonstrate development within each cognitive domain. These work products are formatively assessed as students progress through the program. As a culminating event for the final assessment in the Masters program, a formal oral defense of the complete electronic portfolio to a committee of faculty members that have served as mentors during the student's progression through the program serves as the summative assessment. Examples of previous and current candidate portfolios may be viewed at http://pangea.tec.selu.edu/

Instructional Software Design	Philosophical Underpinings of Educational Technology
Instructional Website Instructional Software Distance Education Projects - Webquests - Instructional Units for Delivery at a Distance	Kuhn Paper McLuhan Paper Postman Paper Healy Paper Position Paper

Research	Leadership
Research Proposal Practicum Proposal Final Action Research Project	Technology Plan Professional Development Plan Networking Plan
Reflection	Additional Evidence
Holistic Reflection of Development - Critical reflection of work and development within the program. Be creative and thorough.	Students should consider including any additional or professional products

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Program Candidates and Completers
Educational Technology Leadership Program

Academic Year	Number of Candidates enrolled in the Program	Number of Program Completers
2003-2004	33	12
2004-2005	28	10
2005-2006	23	10
2006-2007	26	5

Master's Degree in Education Technology Leadership
(36 hours)

Required/Core Courses/Last Time Offered/Credit Hours:

EDF 600	Educational Research (Fall '06)	3 hrs
EDF 607	Philosophy of Education (Fall '06)	3 hrs
ETEC 630	Technology Planning and Administration (Summer '05)	3 hrs
ETEC 644	Design and Development of Instructional Software (Fall '06) For Elementary and Secondary Schools	3 hrs
ETEC 645	Curricular Design for Education at a Distance (Fall '05)	3 hrs
ETEC 650	Educational Telecommunications (Spring '06)	3 hrs
ETEC 660	Educational Technology Leadership for Change (Fall '06)	3 hrs
ETEC 665	Design of Professional Development Programs For K-12 Technology Integration (Summer '05)	3 hrs
ETEC 680	Practicum for Technology (Spring '06)	3 hrs
ETEC 695	Evaluation of Instructional Technology Research (Fall '06)	3 hrs

30 hours of Required/Core Courses

Suggested Electives – Non-Thesis Option (chose 6 hours from the following):

LSA 618	Information Literacy (Spring '06)	3 hrs
ETEC 620	Infusion of Technology into Teaching (Fall '06)	3 hrs
ETEC 635	Legal Issues in the Digital Age (Fall '02)	3 hrs
ETEC 641	Webmastering for K-12 Instructional Delivery (Fall '06)	3 hrs
ETEC 646	Advanced Design of Instructional Software (Fall '03)	3 hrs
EDF 701	Educational Statistics (Required if Thesis Option is Selected)	3 hrs

6 hours of Suggested Electives

Thesis Option: The Thesis Option is suggested for all candidates who plan to pursue degree study beyond the M.Ed. degree.

ETEC 770	Thesis Research	6 hrs

6 hours for Thesis Option

TOTAL FOR TECHNOLOGY LEADERSHIP DEGREE M. Ed. -- 36 semester hrs

Section II – Assessments and Related Data

Name of Assessment	Type of Assessment	When Assessment is Administered	In
			Assessme
1. Entry Level Interview	Faculty Interview with Applicants	Upon Application to the program	Included
2. Advanced Programs Surveys	Self-Report Survey of students entering and at the end of certification coursework	Upon Admission to Program & Upon Completion of Educational Technology Facilitator coursework	Included
3. Classroom or School Website	Student Project Scored with Rubric (included in Portfolio)	Beginning - First course in Three Course Certification Sequence ETEC 644	Included
4. Action Research Project	Student project Scored with Rubric (included in Portfolio)	End - Third Course in Three Course Certification Sequence ETEC 660	Included
5. Software Design Project	Student Project Scored with Rubric (included in Portfolio)	Beginning - First Course in Three Course Certification Sequence ETEc 644	Included
6. Hardware and Networking Technology Performance Assessments	Performance Assessment Scored with Rubric	Middle - Second Course in Three Course Certification Sequence ETEC 650	Included
7. School Site Technology Plan	Student project Scored with Rubric (included in Portfolio)	Middle - Second Course in Three Course Certification Sequence ETEC 650	Included

SECTION III—STANDARDS ASSESSMENT CHART

ISTE STANDARD	APPLICABLE ASSESSMENTS FROM SECTION II
TF-I. Technology Operations and Concepts. Educational technology facilitators demonstrate an in-depth understanding of technology operations and concepts. Educational technology facilitators:	
A. Demonstrate knowledge, skills, and understanding of concepts related to technology (as described in the ISTE National Educational Technology Standards for Teachers).	
1. Assist teachers in the ongoing development of knowledge, skills, and understanding of technology systems, resources, and services that are aligned with district and state technology plans. 2. Provide assistance to teachers in identifying technology systems, resources, and services to meet specific learning needs.	Assessments: 1,2
B. Demonstrate continual growth in technology knowledge and skills to stay abreast of current and emerging technologies.	
1. Model appropriate strategies essential to continued growth and development of the understanding of technology operations and concepts.	Assessments 2,3,5,6,7
TF-II. Planning and Designing Learning Environments and Experiences. Educational technology facilitators plan, design, and model effective learning environments and multiple experiences supported by technology. Educational technology facilitators:	
A. Design developmentally appropriate learning opportunities that apply technology-enhanced instructional strategies to support the diverse needs of learners.	
1. Provide resources and feedback to teachers as they create developmentally appropriate curriculum units that use technology. 2. Consult with teachers as they design methods and strategies for teaching computer/technology concepts and skills within the context of classroom learning. 3. Assist teachers as they use technology resources and strategies to support the diverse needs of learners including adaptive and assistive technologies.	Assessments 1,2,3,4,5,6,7
B. Apply current research on teaching and learning with technology when planning learning environments and experiences.	
1. Assist teachers as they apply current research on teaching and learning with technology when planning learning environments and experiences.	Assessments 3,4,5,6
C. Identify and locate technology resources and evaluate them for accuracy and suitability.	
1. Assist teachers as they identify and locate technology resources and evaluate them for accuracy and suitability based on district and state standards. 2. Model technology integration using resources that reflect content standards.	Assessments 1,2,3,4,5,6
D. Plan for the management of technology resources within the context of learning activities.	
1. Provide teachers with options for the management of technology resources within the context of learning activities.	Assessments 4,6,7

ISTE STANDARD[1]	APPLICABLE ASSESSMENTS FROM SECTION II
E. Plan strategies to manage student learning in a technology-enhanced environment.	
1. Provide teachers with a variety of strategies to use to manage student learning in a technology-enhanced environment and support them as they implement the strategies.	Assessment 4,6,7
F. Identify and apply instructional design principles associated with the development of technology resources.	
Assist teachers as they identify and apply instructional design principles associated with the development of technology resources.	Assessment 1,2,3,4,5
TF-III. Teaching, Learning, and the Curriculum. Educational technology facilitators apply and implement curriculum plans that include methods and strategies for utilizing technology to maximize student learning. Educational technology facilitators:	
A. Facilitate technology-enhanced experiences that address content standards and student technology standards.	
1. Use methods and strategies for teaching concepts and skills that support integration of technology productivity tools (refer to NETS for Students). 2. Use and apply major research findings and trends related to the use of technology in education to support integration throughout the curriculum. 3. Use methods and strategies for teaching concepts and skills that support integration of research tools (refer to NETS for Students). 4. Use methods and strategies for teaching concepts and skills that support integration of problem solving/ decision-making tools (refer to NETS for Students).	Assessment

[1] NCATE will provide a link to the full set of SPA standards, including indicators/elements/dimensions and supporting explanations.

ISTE STANDARD[1]	APPLICABLE ASSESSMENTS FROM SECTION II
5. Use methods and strategies for teaching concepts and skills that support use of media-based tools such as television, audio, print media, and graphics.	1,2,3,4,5,7
6. Use and describe methods and strategies for teaching concepts and skills that support use of distance learning systems appropriate in a school environment.	
7. Use methods for teaching concepts and skills that support use of web-based and non web-based authoring tools in a school environment.	
B. Use technology to support learner-centered strategies that address the diverse needs of students.	
1. Use methods and strategies for integrating technology resources that support the needs of diverse learners including adaptive and assistive technology.	Assessment 1,2,3,4,5,7
C. Apply technology to demonstrate students' higher order skills and creativity.	
1. Use methods and facilitate strategies for teaching problem solving principles and skills using technology resources.	Assessment 1,2,3,4,5
D. Manage student-learning activities in a technology-enhanced environment.	
1. Use methods and classroom management strategies for teaching technology concepts and skills in individual, small group, classroom, and/or lab settings.	Assessment 1,2,3,4,5
E. Use current research and district/region/state/national content and technology standards to build lessons and units of instruction.	
1. Describe and identify curricular methods and strategies that are aligned with district/region/state/national content and technology standards.	Assessment 1,2,3,4,5
2. Use major research findings and trends related to the use of technology in education to support integration throughout the curriculum.	
TF-IV. Assessment and Evaluation. Educational Technology facilitators apply technology to facilitate a variety of effective assessment and evaluation strategies. Educational technology facilitators:	
A. Apply technology in assessing student learning of subject matter using a variety of assessment techniques.	
1. Model the use of technology tools to assess student learning of subject matter using a variety of assessment techniques.	Assessment 1,2,3,4,5
2. Assist teachers in using technology to improve learning and instruction through the evaluation and assessment of artifacts and data.	
B. Use technology resources to collect and analyze data, interpret results, and communicate findings to improve instructional practice and maximize student learning.	
1. Guide teachers as they use technology resources to collect and analyze data, interpret results, and communicate findings to improve instructional practice and maximize student learning.	Assessment 4,7
C. Apply multiple methods of evaluation to determine students' appropriate use of technology resources for learning, communication, and productivity.	
1. Assist teachers in using recommended evaluation strategies for improving students' use of technology resources for learning, communication, and productivity.	Assessment 1,2,4,7
2. Examine and apply the results of a research project that includes evaluating the use of a specific technology in a P-12 environment.	
TF-V. Productivity and Professional Practice. Educational technology facilitators apply technology to enhance and improve personal productivity and professional practice. Educational technology facilitators:	
A. Use technology resources to engage in ongoing professional development and lifelong learning.	
1. Identify resources and participate in professional development activities and professional technology organizations to support ongoing professional growth related to technology.	Assessment 1,2,3,7
2. Disseminate information on district-wide policies for professional growth opportunities for staff, faculty, and administrators.	
B. Continually evaluate and reflect on professional practice to make informed decisions regarding the use of technology in support of student learning.	
1. Continually evaluate and reflect on professional practice to make informed decisions regarding the use of technology in support of student learning.	Assessment 1,2,4,7
C. Apply technology to increase productivity.	
1. Model advanced features of word processing, desktop publishing, graphics programs, and utilities to develop professional products.	Assessment 1,2,3,4,5,6,7
2. Assist others in locating, selecting, capturing, and integrating video and digital images, in varying formats for use in presentations, publications, and/or other products.	
3. Demonstrate the use of specific-purpose electronic devices (such as graphing calculators, language translators, scientific probeware, or electronic thesaurus) in content areas.	
4. Use a variety of distance learning systems and use at least one to support personal and professional development.	
5. Use instructional design principles to develop hypermedia and multimedia products to support personal and professional development.	
6. Select appropriate tools for communicating concepts, conducting research, and solving problems for an intended audience and purpose.	
7. Use examples of emerging programming, authoring, or problem solving environments that support personal and professional development.	

ISTE STANDARD[1]	APPLICABLE ASSESSMENTS FROM SECTION II
8. Set and manipulate preferences, defaults, and other selectable features of operating systems and productivity tool programs commonly found in P-12 schools.	
D. Use technology to communicate and collaborate with peers, parents, and the larger community in order to nurture student learning.	
1. Model the use of telecommunications tools and resources for information sharing, remote information access, and multimedia/hypermedia publishing in order to nurture student learning. 2. Communicate with colleagues and discuss current research to support instruction, using applications including electronic mail, online conferencing, and web browsers. 3. Participate in online collaborative curricular projects and team activities to build bodies of knowledge around specific topics. 4. Design and maintain Web pages and sites that support communication between the school and community.	1,2,3,4,5,6,7
TF-VI. Social, Ethical, Legal, and Human Issues. Educational technology facilitators understand the social, ethical, legal, and human issues surrounding the use of technology in P-12 schools and assist teachers in applying that understanding in their practice. Educational technology facilitators:	
A. Model and teach legal and ethical practice related to technology use.	
1. Develop strategies and provide professional development at the school/classroom level for teaching social, ethical, and legal issues and responsible use of technology. 2. Assist others in summarizing copyright laws related to use of images, music, video, and other digital resources in varying formats.	3,5,7
B. Apply technology resources to enable and empower learners with diverse backgrounds, characteristics, and abilities.	
1. Assist teachers in selecting and applying appropriate technology resources to enable and empower learners with diverse backgrounds, characteristics, and abilities. 2. Identify, classify, and recommend adaptive/assistive hardware and software for students and teachers with special needs and assist in procurement and implementation.	1,2,4,5,6,7
C. Identify and use technology resources that affirm diversity.	
1. Assist teachers in selecting and applying appropriate technology resources to affirm diversity and address cultural and language differences.	1,2,4
D. Promote safe and healthy use of technology resources.	
1. Assist teachers in selecting and applying appropriate technology resources to promote safe and healthy use of technology.	1,2,3,4
E. Facilitate equitable access to technology resources for all students.	
1. Develop a summary of effective school policies and classroom management strategies for achieving equitable access to technology resources for students and teachers.	1,2,3,4,7
TF-VII. Procedures, Policies, Planning and Budgeting for Technology Environments. Educational technology facilitators promote the development and implementation of technology infrastructure, procedures, policies, plans, and budgets for P-12 schools. Educational technology facilitators:	
A. Use the school technology facilities and resources to implement classroom instruction.	
1. Use plans to configure software/computer/technology systems and related peripherals in laboratory, classroom cluster, and other appropriate instructional arrangements. 2. Use local mass storage devices and media to store and retrieve information and resources. 3. Discuss issues related to selecting, installing, and maintaining wide area networks (WAN) for school districts. 4. Model integration of software used in classroom and administrative settings including productivity tools, information access/telecommunication tools, multimedia/hypermedia tools, school management tools, evaluation/portfolio tools, and computer-based instruction. 5. Utilize methods of installation, maintenance, inventory, and management of software libraries. 6. Use and apply strategies for troubleshooting and maintaining various hardware/software configurations found in school settings. 7. Utilize network software packages used to operate a computer network system. 8. Work with technology support personnel to maximize the use of technology resources by administrators, teachers, and students to improve student learning.	1,2,6,7
B. Follow procedures and guidelines used in planning and purchasing technology resources.	
1. Identify instructional software to support and enhance the school curriculum and develop recommendations for purchase. 2. Discuss and apply guidelines for budget planning and management procedures related to educational computing and technology facilities and resources. 3. Discuss and apply procedures related to troubleshooting and preventive maintenance on technology infrastructure. 4. Apply current information involving facilities planning issues and computer related technologies. 5. Suggest policies and procedures concerning staging, scheduling, and security for managing computers/technology in a variety of school/laboratory/classroom settings. 6. Use distance and online learning facilities. 7. Describe and identify recommended specifications for purchasing technology systems in school settings.	1,2,6,7
C. Participate in professional development opportunities related to management of school facilities, technology resources, and purchases.	
1. Support technology professional development at the building/school level utilizing adult learning theory.	7
TF-VIII. Leadership and Vision. Educational technology facilitators will contribute to the shared vision for campus integration of technology and foster an environment and culture conducive to the realization of the vision. Educational technology facilitators:	
A. Utilize school technology facilities and resources to implement classroom instruction.	
1. Discuss and evaluate current research in educational technology.	4

ISTE STANDARD[1]	APPLICABLE ASSESSMENTS FROM SECTION II
A. Apply strategies for and knowledge of issues related to managing the change process in schools.	
1. Discuss the history of technology use in schools.	1,2
B. Apply effective group process skills.	
1. Discuss the rationale for forming school partnerships to support technology integration and examine an existing partnership within a school setting.	7
C. Lead in the development and evaluation of district technology planning and implementation.	
1. Participate in cooperative group processes and identify the processes that were effective. 2. Conduct an evaluation of a school technology environment. 3. Identify and discuss national, state, and local standards for integrating technology in the school environment. 4. Describe curriculum activities or performances that meet national, state, and local technology standards. 5. Discuss issues related to developing a school technology plan. 6. Discuss the elements of and strategies for developing a technology strategic plan. 7. Examine issues related to hardware and software acquisition and management.	7
D. Engage in supervised field-based experiences with accomplished technology facilitators and/or directors.	
1. Examine components needed for effective field-based experiences in instructional program development, professional development, facility and resource management, WAN/LAN/wireless systems, or managing change related to technology use in school-based settings.	4,7

Faculty Expertise
Educational Technology Leadership Program

Faculty Member Name	Highest Degree, Field, & University	Assignment: Indicate the role of the faculty member	Faculty rank	Tenure Track (yes/ no)	Scholarship, Leadership in Professional Associations, and Service (list up to 3 major contributions in the past 3 years	Teaching or other professional experience in p-12 schools
Nan B. Adams	PhD C&I University of New Orleans	Graduate Faculty	Associate Professor	Yes	Publication of 4 peer-reviewed articles Keynote Speaker NETT NECC Program Reviewer	5 years teaching 9-12 2 years teaching 1-8
Willie Ennis	PhD Kansas State University	Faculty	Associate Professor	Yes	Publication of 3 peer-reviewed articles Member – Technology Consortium for Teacher Education	
John Fulwiler	EdD University of Southern Mississippi	Program Coordinator	Professor	Yes	Publication of 3 peer-reviewed articles Louisiana Board of Examiners – NCATE member Coordinator, National	

					Center for the Urban Community	
Robert Hancock	PhD University of North Texas	Faculty	Assistant Professor	Yes	editor for NCPEA Connexions for Educational Technology Leadership Author of book chapter NECC Program Reviewer	6 years middle school

Description of the Assessment and Use in the Program:

This assessment determines the skill level and disposition of students as they enter the didactic portion of the Educational Technology Leadership program.

This assessment allows for evaluation of the components needed for the continual growth of knowledge, skills and understanding of concepts related to technology. Because this assessment of skills occurs after the student has been admitted to the Graduate School but before they are allowed to enroll in coursework for the M.Ed. Technology Leadership program, this assessment provides for appropriate advisement for students who require development of certain technology skills before they enter the program.

Students are expected to posses the general skills and proficiency in most of the NETS-T and NETS-S standards before entering the program. These skills that support technology use in instructional settings are almost always acquired through successful completion of the Louisiana INTECH training program available to all teachers in Louisiana. For those students not completing the LaINTECH program, a demonstration of skill through coursework or activity focused on use of technology in the classroom is required. The use of the Advanced Programs Survey of Technology (Assessment 2) is used as part of this interview process.

Standards Addressed:

This assessment mainly is used to assess the NETS for Teacher Standards, although the assessment is also designed to demonstrate alignment with

TF-I.A
TF-II.A,C,F
TF-III.A,B,C,D,E
TF-IV.A,C
TF-V.A,B,C,D
TF-VI.B,C,D,E
TF-VII.A,B
TF-VIII.A

As described on the Louisiana Department of Education website, Louisiana INTECH is an intense, content-rich, hands-on, and technology base staff development program. Louisiana INTECH, an adaptation of the Georgia InTECH model, provides teachers with many examples of effective technology-based strategies that support and enhance curriculum and can serve as a catalyst for fundamental change in overall teaching and learning processes. INTECH teams of teachers learn basic technology skills while focusing on project-based activities that are based upon the Louisiana Content Standards. Five critical areas characterize this integrated training approach: (1) classroom management techniques, (2) new designs for learning, (3) best pedagogical practices, (4) curriculum standards, and (5) modern technology skills.

The coursework or activity required would mirror that provided by the Louisiana INTECH program. Technology Coordinators at the school site are required to successfully complete the Louisiana INTECH program.

Data Analysis:

All students applying to this program were accepted for entrance.

Implications from Data Analysis:

Louisiana has implemented the Louisiana INTECH program for all teachers and leaders in the state. This has raised the competency level of teachers statewide and results in technology aware and skilled teachers in the classroom and in leadership positions. This is indicated by all candidates possessing the skills required for entry into this program.

Section IV
Assessment 1: Admission Rubric
Entry Screening and Entry Level Interview
Data Table

Acceptable: demonstrates the appropriate levels of attainment
Unacceptable: does not demonstrate the appropriate levels of attainment

General Attributes	Acceptable		Unacceptable	
	05/06	06/07	05/06	06/07
Mechanics of Application Letter				
Content of Application Letter				
GRE Verbal				
GRE Quantitative				
GRE Analytical (if appropriate)				
Strength of Recommendation				
Personal Interview (if applicable)				

Assessment of Technology Skills	Yes		No		Needs Additional Coursework (elaborate)
	05/06	06/07	05/06	06/07	
LaINTECH training					0
Electronic Media/Website Evidence					0
Position as Tech Coordinator in Schools					0

Academic Year	Number of students applying to the Program	Number of Students admitted to the program	Number of Student Requiring Additional Coursework for Admittance
2005-2006	10	10	0
2006-2007	8	8	0

Description of the Assessment and Use in the Program:

This self report assessment has been used by other departments to determine the initial skill levels and dispositions of students as they enter the didactic portion of an advanced leadership program. This assessment has been adopted and adapted to more directly address the skills and dispositions of Technology Professionals and will be used in the newly redesigned M.Ed. Technology Leadership program being implemented in Fall 2007. Data has yet to be retrieved from this survey.

This survey is also planned to collect data with this assessment at two more times during the degree program – when students attain the 3 courses needed for Educational Technology Facilitator certification (ETEC 644, ETEC 650 & ETEC 660) and after they successfully defend their portfolios of work to graduate from the program. It is hoped that each of these data collection points will provide student growth data and help guide the evaluation of student skills throughout the advanced degree program.

This assessment allows for evaluation of the components needed for the continual growth of knowledge, skills and understanding of concepts related to technology. Students admitted to this program are expected to posses the general skills and proficiency in most of the NETS-T and NETS-S standards. These skills that support technology use in instructional settings are almost always acquired through successful completion of the Louisiana INTECH training program available to all teachers in Louisiana or through coursework or activity focused on use of technology in the classroom is required. Because the first administration of this assessment of skills occurs after the student has been admitted to the Graduate School but before they are allowed to enroll in coursework for the M.Ed. Technology Leadership program, this assessment provides for appropriate advisement for students who require development of certain technology skills before they enter the program.

Standards Addressed:

This assessment is also designed to demonstrate alignment with the NETS for Teacher Standards and NETS for Students standards. Additionally, the assessment is designed to demonstrate alignment with standards:

TF-I.A,B
TF-II.A,C,F
TF-III.A,B,C,D,E
TF-IV.A,C
TF-V.A,B,C,D
TF-VI.B,C,D,E

TF-VII.A,B
TF-VIII.A

As described on the Louisiana Department of Education website, Louisiana INTECH is an intense, content-rich, hands-on, and technology base staff development program. Louisiana INTECH, an adaptation of the Georgia InTECH model, provides teachers with many examples of effective technology-based strategies that support and enhance curriculum and can serve as a catalyst for fundamental change in overall teaching and learning processes. INTECH teams of teachers learn basic technology skills while focusing on project-based activities that are based upon the Louisiana Content Standards. Five critical areas characterize this integrated training approach: (1) classroom management techniques, (2) new designs for learning, (3) best pedagogical practices, (4) curriculum standards, and (5) modern technology skills.

The coursework or activity required would mirror that provided by the Louisiana INTECH program. Technology Coordinators at the school site are required to successfully complete the Louisiana INTECH program.

Data Analysis:

Because this is a newly designed assessment for a redesigned program which admitted its first candidates for Fall 2007, no data exists for this instrument.

Implications from Data Analysis:

It is intended for this survey to track the skills and dispositions of the students as they progress through the Master of Education in Technology Leadership program.

Masters Technology

Read through the following items and indicate whether you have No Experience, Some Experience, or Much Experience. Answer questions and provide examples or note with N/A.

General Computer Skills

| Carry out basic Windows or Mac operations | ☐ No Experience | ☐ Some Experience | ☐ Much Experience |

General Computer Skills

| Create files and folders/directories | ☐ No Experience | ☐ Some Experience | ☐ Much Experience |

General Computer Skills

| Copy, move, delete files, and folders/directories | ☐ No Experience | ☐ Some Experience | ☐ Much Experience |

General Computer Skills

| Find and open existing files and documents from various directories and drives | ☐ No Experience | ☐ Some Experience | ☐ Much Experience |

General Computer Skills

| Create and save documents in various file formats and in different directories and drives | ☐ No Experience | ☐ Some Experience | ☐ Much Experience |

General Computer Skills

| Create, edit, and print various types of documents | ☐ No Experience | ☐ Some Experience | ☐ Much Experience |

General Computer Skills

| Do you regularly use computers in your current position (i.e. 1-2 times per week)? | ☐ Yes | ☐ No |

Word Processing (e.g. AppleWorks, Microsoft Word, Microsoft Works, etc.)

| | ☐ | ☐ | ☐ |

	No Experience	**Some Experience**	**Much Experience**

Do you use word processing on a regular basis in your current teaching position (i.e. 1-2 times per week)?

○	○
Yes	**No**

How have you used word processing with students in an educational activity?

If "no" to the previous item, then type N/A

[text area]

Spreadsheets (e.g. Excel, AppleWorks, Lotus 123, etc.)

○	○	○
No Experience	**Some Experience**	**Much Experience**

Have you used spreadsheets with students in an educational activity?

○	○
Yes	**No**

How have you used spreadsheets in your current position (if applicable)?

If "no" to the previous item, then type N/A

[text area]

Databases (e.g., FileMaker Pro, Access, etc.)

○	○	○
No Experience	**Some Experience**	**Much Experience**

Do you use databases with students in an educational activity?

○	○
Yes	**No**

How have you used databases in your current position (if applicable)?

If "no" to the previous item, then type N/A

[text area]

Electronic Presentations (e.g., PowerPoint, Hyperstudio, KidPix)

	○	○	○
	No Experience	**Some Experience**	**Much Experience**

Do you use electronic presentations with students in an educational activity?

	○	○
	Yes	**No**

How have you used electronic presentations in your current position (if applicable)?

If "no" to the previous item, then type N/A

World Wide Web (e.g., Internet Explorer, Netscape Navigator)

Browsing/searching	○	○	○
	No Experience	**Some Experience**	**Much Experience**

World Wide Web

Creating web pages	○	○	○
	No Experience	**Some Experience**	**Much Experience**

Do you use the World Wide Web to teach?

	○	○
	Yes	**No**

Give an example of how you use the World Wide Web to teach.

If "no" to the previous item, then type N/A

Telelcommunications (e.g., Outlook, Eudora, AOL, etc.)

E-mail	○	○	○
	No Experience	**Some Experience**	**Much Experience**

Telecommunications (e.g., Outlook, Eudora, AOL, etc.)

Electronic bulletin boards (forums)	○	○	○
	No Experience	**Some Experience**	**Much Experience**

Telecommunications (e.g., Outlook, Eudora, AOL, etc.)

Electronic chat (Instant Messaging, Internet Relay Chat)	☐ No Experience	☐ Some Experience	☐ Much Experience

Telecommunications (e.g., Outlook, Eudora, AOL, etc.)

Desktop videoconferencing	☐ No Experience	☐ Some Experience	☐ Much Experience

Telecommunications (e.g., Outlook, Eudora, AOL, etc.)

List servers	☐ No Experience	☐ Some Experience	☐ Much Experience

Do you use telecommunications on a regular basis in your current position (i.e., 1-2 times per week)?

	☐ Yes	☐ No

How have you used telecommunications in your current position (if applicable)?

If "no" to the previous item, then type N/A	[text box]

Other Technology Skills

Digital Camera	☐ No Experience	☐ Some Experience	☐ Much Experience

Other Technology Skills

Digital Video	☐ No Experience	☐ Some Experience	☐ Much Experience

Other Technology Skills

Electronic Chat (Instant Messaging, Internet Relay Chat)	☐ No Experience	☐ Some Experience	☐ Much Experience

Other Technology Skills

LCD panel/projector	☐ No Experience	☐ Some Experience	☐ Much Experience

Other Technology Skills			
TV as a projector device	◌ No Experience	◌ Some Experience	◌ Much Experience

Other Technology Skills			
CD-ROMs/DVDs	◌ No Experience	◌ Some Experience	◌ Much Experience

Other Techology Skills			
Scanner	◌ No Experience	◌ Some Experience	◌ Much Experience

Do you use any of these technologies on a regular basis to teach?		
	◌ Yes	◌ No

Give an example of how you have used these technologies to teach.

SECTION IV
Assessment 3
Classroom or School Website
Narrative

Description of the Assessment Instrument and Use in the Program:

This assessment is completed during ETEC 644, the first course in the three course sequence that comprises the Educational Technology Facilitator track. This project is designed to demonstrate technical skill with webpage and software development along with a demonstration of student competency in designing and creating supportive websites for educational institutions. As a technology facilitator, students will be required to disseminate information that supports the school and the classroom teacher.

This project requires a website to be designed that will support daily work at the school level. Students must consider information and solicit input that will help guide their development to make this site is useful to all educational stakeholders – administration, students, parents/community and other teachers. Additionally, this website may be designed as a site for other teachers at their school to use or as a model for other teachers as they develop their own class-based websites.

Standards Addressed:

TF-I.B
TF-II.A,B,C,F
TF-III.A,B,C,D,E
TF-IV.A
TF-V.A,C,D
TF-VI.A,D,E

Data Analysis:

In keeping with the philosophy of the Educational Technology Leadership Masters program this project will be returned to the student for revision until it is considered acceptable or exemplary. The act of revising a project until it is considered acceptable is considered to be of more value to the student than devising an assessment instrument that would return a range of scores. Ideally, all students would develop exemplary products and understand that a project is not finished until it is at least in good working order and acceptable for use. This philosophy coupled with the low student – teacher ratio in classes results in all enrolled students successfully creating acceptable classroom or school website.

Implications from Data Analysis:

Because each candidate has successfully completed this project, it indicates that students have met the standards assessed by this instrument. Of particular note are the standard of TF-II – Planning and Designing Learning Environments and Experiences.

Assessment #3
School or Classroom Website Project
ETEC 644

This project is focused on creating an informational website to foster communication at your school. For classroom teachers, a classroom website is an appropriate project. For current school technology coordinators, a school website or a website for the library or technology center you run is appropriate.

Consider what types of things should be shared with parents, students, colleagues and the world. Additionally, consider how present them in useful and easy to access formats. This assignment requires the design of a series of web-based documents. This school or classroom website must conform to a series of requirements, but it is largely left to you in terms of presentation and organization, as well as the specific content.

This project requires you to create a website that supports daily work at your school. You should solicit information from all of the stakeholders (administration, students, parents and other teachers) at your school to help guide your development. This site may be designed as a site for other teachers to use or to be considered as a model for other teachers as they develop their own class-based websites.

Assignment Requirements

Website with multiple pages

- Introduction Page – either to school or to your classroom
- A teacher link (tech coordinator link) that includes information about you and contact information.
- "Philosophy" statement (teaching philosophy/purpose page)
- Relevant information that serves to inform your audience of parents, students, administrators and other teachers.
- Collection of links specific to your teaching area (i.e. science or language arts) that will include some teaching websites (at least 3).

Mechanics

- Must be accessible in your web based electronic portfolio (Pangea)
- Images must be included
- No broken links
- Clarity of navigation (ex: menu bar)
- Tested in multiple browser (Internet Explorer and Mozilla, at least) and OS (PC/Mac)

Aesthetics

- Page content is managed and organized (ex: layout uses tables, limited empty space)
- Color schemes are complementary (default: use placement school website scheme)
- Visual clarity of text and information

Please review the assessment rubric for further considerations when developing your website.

Assessment #3
Class or School Website
Evaluation Rubric

General Website Considerations	Acceptable	Unacceptable	Comments
Organization	- Inviting opening page draws the visitor inside - Details are logical and effective - Layout of pages provides good direction - How to explore an idea is clear - Clear connection among sections - Easy to navigate through the site	- Inconsistent structure of pages - Some inconsistent sequencing - Some pages incomplete - Some links disjointed or lack purpose - Unclear connections among sections - Difficult to navigate in an organized way	
Information	- Information is accurate - Content connections clear - Information relevant and valuable to intended audience	- Information not always clear - Content connections not always clear - Information not always relevant or valuable to	

	• All information relates to the overall purpose • Complies fully with copyright guidelines • Provides contact information, name of site and revision date on each page	intended audience • Strong purpose not demonstrated • Complies with some, but not all copyright guidelines • Does not provide contact information or revision date	
Presentation	• Web site is clearly identified and easy to find • The layout is clear and easy to follow • Backgrounds and text work well together • Graphical elements are used consistently • Multimedia adds to the main purpose • Links are appropriate and informative	• Web site easy to find • Layout is confusing or inappropriate • Backgrounds and text do not work well together • Inconsistent or inappropriate graphics • Multimedia sometimes doesn't add to site • Too many unrelated links, or too few links	
Technical Aspects	• Links work properly • Graphics are optimized • Works in all major browsers • Works in text only mode	• Not all links work properly • Graphics are generally optimized • Pages don't work in both major browsers	• Links don't work properly • Graphic elements not optimized • Specific browser needed

	• Multimedia resources work properly	• Text-only mode could be improved • Multimedia resources work most of the time	• Text-only mode does not work • Multimedia resources fail to work, or plug-in not provided
Mechanics	• Organizational structure is clear and coherent • Grammar and usage are correct • Punctuation is correct • Spelling is correct • Site needs little or no editing	• Organizational structure is somewhat coherent • Minor problems with grammar or usage • Internal punctuation sometimes missing or wrong • Spelling is usually correct • Site needs some editing	• Organizational structure is not clear or coherent • Noticeable errors in grammar or usage • Many punctuation mistakes • Frequent spelling errors • Site needs extensive editing
Educational Content Considerations	**Acceptable**	**Unacceptable**	**Comments**
Philosophy & Academic Standards	• School and/or teacher philosophy or mission is stated and evident in content of web site • Academic standards are stated and are consistent with state standards	• School and/or teacher philosophy or mission is not present and is not reflected in the content of the site • Neither academic standards nor state standards are listed	

	• Links to district policies and resources are provided • The school Acceptable Use Policy is clearly stated for students, parents and teachers	• Links to district policies and resources are not provided • The school Acceptable Use Policy is not provided	
School or Classroom Information	• Site is relevant to the school community • Location and type of school are provided in text and visually • School personnel and their contact information are provided • Information such as the school calendar and lunch menus is provided • School policies (for example, attendance, discipline, or grading) are provided	• Site is not relevant to the school community • Location and type of school are not listed • School personnel and their contact information are not provided • Little or no school information is provided • School policies are not provided	
Curriculum & School Programs	• Exemplifies best practices of technology use in education • A description of	• Does not mention best practices of technology use in education • A description of	

	curriculum is provided • Unique characteristic of the school or classroom are clearly evident	curriculum is not provided • Unique characteristic of the school are not evident	
Audience	• Site addresses needs and interests of community members, parents, students, and teachers • Site features students' work • Site features students' and teachers' classroom activities and projects	• Site does not address needs and interests of community members, parents, students, and teachers • Site does not include students' work • Site does not include classroom activities or projects	
Sensitivity	• Site addresses sensitivity to cultural diversity • Site addresses sensitivity to language needs • Site addresses sensitivity to special needs	• Site addresses little or no sensitivity to cultural diversity • Site addresses little or no sensitivity to language needs • Site addresses little or no sensitivity to special needs	

Links	• Site provides a variety of relevant educational links for students • Site provides a variety of relevant links for parents • Site provides a variety of relevant links for teachers	• Site provides few or no educational links for students • Site provides few or no links for parents • Site provides few or no links for teachers	

SECTION IV
Assessment 4
Action Research Project
Narrative

Description of Assessment Instrument and Use in the Program:

This project is required in the third of the three courses required for the Educational Technology Facilitator certification. The student is required to determine a problem that exists in their school setting, investigate the issues surrounding this problem and design an Action Research Project that will be implemented to provide data to guide decision making about the identified problem. This requires the student to interact with the administration, faculty, students and often parents where the research will occur.

As with any research project, students are required to research theories and practices that underpin their area of inquiry. A review of the literature to inform the research question they propose along with articulation of methodology that will yield appropriate and informative data is executed. Students implement these Action Research projects as part of a practicum course, which is overseen by a Graduate Faculty member in the department of Educational Leadership and Technology. Those projects that extend beyond the scope of the student's own classroom will be required to gain approval of IRB for implementation.

Standards Addressed:

TF-II.A,B,C,D,E,F
TF-III.A,B,C,D,E
TF-IV.A,B,C
TF-V.B,C,D
TF-VI.B,C,D,E
TF-VIII.A,D

Data Analysis:

In keeping with the philosophy of the Educational Technology Leadership Masters program this project will be returned to the student for revision until it is considered acceptable or exemplary. The act of revising a project until it is considered acceptable is considered to be of more value to the student than devising an assessment instrument that would return a range of scores. Ideally, all students would develop exemplary products and understand that a project is not finished until it is at least in good working order and acceptable for use. This philosophy coupled with the low student – teacher ratio in classes results in all enrolled students successfully performing Action Research.

Implications from Data Analysis:

Because each candidate has successfully completed this project, it indicates that students have met the standards assessed by this instrument. Of particular note is the standard of TF-VIII – Leadership and Vision.

Assessment #4

Action Research Project (120 points)

Background Information:

Use all information from the course.

Written Assignment:

Write a comprehensive description of what you could do next semester to address a specific educational technology need at your school. This should be considered a proposal for an action research project that could be implemented as part of your Educational Technology Practicum (ETEC 680). This should include Chapters 1, 2 and 3 as described below. Chapters 4 and 5 will be developed as a part of the Educational Technology Practicum (ETEC 680).

Chapter One: Introduction

This chapter should provide an introduction to your proposed research project. It should include a brief description of the problem, a statement of the hypothesis and any definition of special terms. It should also include:

- **Leadership Role** - A brief (3 to 4 sentence) overview of how you plan to assume a leadership role to help your school improve student achievement.
- **School Description** - A description of the school or insitution where this study will be conducted.
- **Student Needs** – A description of available data that supports the specific academic need that you will address at your school.
- **School Goal** – A listing of a measurable, student-oriented, results-oriented, focused goal that address a specific academic need of students at your school. (This could be one of your school goals – rewritten.)
- **School Ecology and School Climate** – A description of the school ecology and school climate that will help you address the measurable

goal. Also identify specific barriers and how you will overcome those barriers to carry out your plan.

- **Change Strategies to support a Paradigm shift** – A description of the change strategies that will target the paradigm shift that will have to occur at your school in order to successfully implement your plan.
- **Risks** – A description of risks that you will have to take as you implement your idea and risks that will be taken by other students, teachers, and your principal when your plan is implemented.

Chapter Two: Review of the Literature

This chapter should provide the theoretical and research basis for your project. The literature review describes and analyzes what has already been done related to your problem. It is not a series of abstracts or annotations but rather an analysis of the relationships and differences between related studies and reports. At least 12 articles or research studies should be reviewed to provide the philosophical underpinnings for the research.

Chapter Three: Methodology

This chapter should include a description of the subjects (students or faculty participants), research design and procedure, and a description of any survey instruments. It should also include:

- **Forms of Inquiry** – A description of additional information that you will need to gather in order to be prepared to carry out your plan next semester to address the identified goal.
- **Change Strategy** – Outline how strategies based on Hall & Hord's Stages of Concern will be infused into your methodology to address the needs of all participants.
- **Collaboration** – A description of collaboration that will occur between you and other school personnel as you develop your plan and/or implement your plan.
- **Sense of Community** – A description of how you will create a sense of community as your plan is being developed/implemented so that others have a sense of ownership and involvement.
- **Resources** – A description of resources that you will need to implement your plan, and a description of how you will secure the resources.

- **Measurement of Incremental Progress** – A description of how you will measure incremental progress toward reaching your overall school goal as you implement your plan.
- **Proposed Assessment Activities -** A description of how you will determine the efficacy of your project. Include questionnaires and other possible assessment instruments and strategies.
- **Plan of Action** – A listing of the steps that you are going to take to implement your plan next semester. Identify what will occur, who will be responsible, and deadline dates.

Steps	Who Responsible	Timetable
1.		
2.		
3.		

Chapter Four: Results

Chapter Five: Conclusions

Action Research Project Assessment Rubric

Scholarly Writing, Presentation, and Style		
Approved with Commendation	*Adequate*	*Unacceptable*
APA style is exemplary and used consistently and extensively throughout the manuscript.	***APA style is used throughout the manuscript but exhibits common errors.***	***APA style is poorly demonstrated.***
Exemplary attention and effort are given to voice, grammar, and flow of writing.	***Adequate attention and effort are given to voice, grammar, and flow of writing.***	***Minimal attention and effort are given to voice, grammar, and flow of writing.***

Evidence of Critical Thinking		
Approved with Commendation	*Adequate*	*Unacceptable*
Clear patterns of idea formation, research by others, and support statements tie ideas to research.	Idea formation lacks sufficient evidence and support.	No attempt has been made to tie ideas to research.
Passionate inquiry is clearly stated.	Inquiry is stated.	Inquiry is missing.
Includes analysis of five (5) or more theorists' works and ideas.	Includes analysis of three (3) theorists' works and ideas.	Includes analysis of one (1) theorist's work and ideas.
Current research is substantial and fully covers the topic.	Current research is present and generally covers the topic. Gaps may be evident.	Current research is minimal and does not cover the topic.
Application is creatively and uniquely supported by the theory and research.	Application is adequately supported by the theory and research.	Application is not supported by the theory and research.
Data Analysis		
Approved with Commendation	**Adequate**	**Unacceptable**
Data Analysis is clearly presented and directly addresses research question	Data analysis is presented and accurate. Data contributes to research	Data analysis is incomplete or incorrect.
Recommendations are insightful and supported by the research findings.	Recommendations are supported by research findings but not complete	Recommendations are missing or not supported by the findings.

NOTE – Students will revise their Action Research Projects until they have attained either Adequate or Approved with Commendation

Assessment #4

Action Research Project Assessment Rubric

N=5

Scholarly Writing, Presentation, and Style		
Approved with Commendation	*Adequate*	*Unacceptable*
1	*4*	*0*

Evidence of Critical Thinking		
Approved with Commendation	*Adequate*	*Unacceptable*
1	4	0

Data Analysis		
Approved with Commendation	**Adequate**	**Unacceptable**
2	3	0

SECTION IV
Assessment 5
Software Design Project
Narrative

Description of Assessment and Use in the Program:

This assessment is completed during ETEC 644, the first course in the three course sequence that comprises the Educational Technology Facilitator track. This project is designed to demonstrate technical skill with webpage and software development along with a demonstration of student competency in designing and creating learning environments and activities utilizing technology.

These project- based instructional units are student designed and demonstrate appropriate uses of technology to support instruction and to address the diverse needs of learners. Students must stay abreast of current and emerging technologies and research on effective teaching using technology to develop this web-based software. They also serve as models to teachers in their own schools and districts who wish to create personalized teaching experiences for their students.

Standards Addressed:

TF-I.B
TF-II.A,B,C,F
TF-III.A,B,C,D,E
TF-IV.A
TF-V.C,D
TF-VI.A,B

Data Analysis:

In keeping with the philosophy of the Educational Technology Leadership Masters program this project will be returned to the student for revision until it is considered acceptable or exemplary. The act of revising a project until it is considered acceptable is considered to be of more value to the student than devising an assessment instrument that would return a range of scores. Ideally, all students would develop exemplary products and understand that a project is not finished until it is at least in good working order and acceptable for use. This philosophy coupled with the low student – teacher ratio in classes results in all enrolled students successfully designing and creating web based educational software.

Implications from Data Analysis:

Because each candidate has successfully completed this project, it indicates that students have met the standards assessed by this instrument. Of particular note is the standard of TF-II – Planning and Designing Learning Environments and Experiences.

Assessment #5
Software Design Project

Description of the Activity:
Each student will select a topic for their project, conceptualize the unit, and write the lessons that will comprise the instructional design. After creating the learning experience, students will post it to their web accounts on Pangea (ETL webserver) in a format that is available for use.

Selecting a Topic:
Select a topic that interests you. This might be a unit that you presently teach in your classroom, something you would like to teach sometime but have not had the opportunity to prepare yet, or something you just find interesting.

Creating Your Software:
Once you have identified your topic, it is time to start designing your software. As you design your project, consider the various aspects that will drive your development process. Decide on the beginning and ending point for your instructional content. Consider using design elements such as navigation and consistent color and text patterns as part of your delivery. Have students review the project as you are developing it – their feedback can be very useful to your project.

You will be expected to create this web-based unit as though students were going to use it. This means that you must create it as though your students will be accessing it and reading it. If you have students who would not be able to read the materials without assistance, you should write your narrative directed towards the educators/parents who will be helping them.

Describing Your Software:
After you have created your instructional design project, prepare a narrative that provides the following about the instructional software/website:

Title of the Software/Website:
Brief Description of the Software/Website:
Brief Description of Instructional Content:
Intended Audience: (Grade/age level, assumed skill proficiencies)
Software Goals: Curriculum related. These are broad and general statements of what you intend the student to learn and/or accomplish through use of this software/website. This should be aligned and identified with your district or state standards and benchmarks.

Posting Your Unit on the Web:
You will be expected to post information for your students (and for your instructor) on the Pangea webserver under your student account. A link should be made to this project from your main homepage.

Assessment #5

Web Based Software Evaluation Rubric

		Criteria					C
			Unacceptable	Needs Work	Acceptable	Exemplary	
	1	**Technical**	Project does not run satisfactorily. There are too many technical problems to view the project.	Project runs minimally. There are many technical problems when viewing the project.	Project runs adequately with minor technical problems.	Project runs perfectly with no technical problems. For example, there are no error messages, all sound, video, or other files are found.	
	2	**Navigation**	Buttons or navigational tools are absent or confusing. No buttons and navigational tools work.	Minimal difficulty experienced while navigating through project.	Few difficulties experienced while navigating through project.	Users can progress intuitively throughout entire project in a logical path to find information. All buttons and navigational tools work.	
	3	**Spelling & Grammar**	Project has multiple errors in spelling and/or grammar. (Four or more errors)	Project minimally honors rules of spelling and/or grammar. (Three or less errors)	Project adequately honors most rules of spelling and/or grammar. (Two or less errors)	Project honors all rules of spelling and/or grammar.	
	4	**Completion**	Project is incomplete and contains many unfinished elements.	Project is incomplete and contains some unfinished elements.	Project is incomplete and contains several unfinished elements.	Project is completely finished.	

5	**Screen Design**	Screens are either barren and stark or confusing and cluttered. Exaggerated emphasis on graphics and special effects weakens the message and interferes with the communication of content and ideas.	Multimedia elements accompany content but there is little sign of mutual reinforcement. There is no attention to visual design criteria such as balance, proportion, harmony and restraint. There is some tendency toward random use of graphical elements that do not reinforce message.	Multimedia elements and content combine to adequately deliver a high impact message with the elements and words reinforcing each other.	The combination of multimedia elements and content takes communication to a superior level. There is clear attention given to balance, proportion, harmony, and restraint. The synergy reaches the intended audience with style and pizzazz.	
6	**Use of Enhancements**	No graphics, video, audio, 3-D, or other enhancements are present or use of these tools is inappropriate.	Limited graphics, video, audio, 3-D, or others enhancements are present but do not always enrich the learning experience. In some instances, use of these enhancements is inappropriate.	Most graphics, video, audio, 3-D, or other enhancements are used appropriately to enrich the experience. For example, clips are either too long or too short to be meaningful.	All graphics, video, audio, 3-D, or other enhancements are used effectively to enrich the learning experience. Enhancements contribute significantly to convey the intended meaning.	
7	**Organization**	The sequence of information is not logical. Menus and paths to information are not evident.	The sequence of information is somewhat logical. Menus and paths are confusing and flawed.	The sequence of information is logical. Menus and paths to most information are clear and direct.	The sequence of information is logical and intuitive. Menus and paths to all information are clear and direct.	
8	**Activities**	Project contains few activities.	Project contains few well-designed and age-appropriate activities.	Although project contains some well-designed and age-appropriate	Project contains a significant number of well-designed age-appropriate	

				activities.	activities.	
9	**Citing Resources**	No sources are properly cited within the project	Few sources are properly cited within the project	Most sources are properly cited within the project	All sources are properly cited within the project	
10	**Permissions Obtained for Resources not Created by the Author**	No permissions to use text, graphics, audio, video, etc. are available.	Few permissions to use text, graphics, audio, video, etc. are available.	Most permissions to use text, graphics, audio, video, etc. are available.	All permissions to use text, graphics, audio, video, etc. are available.	
11	**Originality**	The work is a minimal collection or rehash of other people's ideas, products, images and inventions. There is no evidence of new thought.	The work is an extensive collection and rehash of other people's ideas, products, images and inventions. There is little evidence of new thought or inventiveness.	The project shows some evidence of originality and inventiveness. While based on an extensive collection of other people's ideas, products, images and inventions, the work extends beyond that collection to offer new insights.	The project shows significant evidence of originality and inventiveness. The majority of the content and many of the ideas are fresh, original, and inventive.	
12	**Curriculum Alignment**	No evidence of connection to target curriculum. Users are not likely to learn from this project.	Some evidence of connection to target curriculum. Users may learn from this project.	Adequate evidence of connection to target curriculum. Users are likely to learn from this project.	Clear evidence of connection to target curriculum. Frequent and clear references are made to facts, concepts, and cited resources. Users will learn from this project.	
13	**Evidence That Content Standards & Objectives Were Met**	No evidence that project content supports content standards and stated objectives.	Little evidence that project content supports content standards and stated objectives.	Some evidence that project content supports content standards and stated objectives.	Clear evidence that project content supports content standards and stated objectives.	

14	**Depth & Breadth of Project Content**	No evidence that higher level thinking skills were used in the creation of this project.	Little evidence that higher level thinking skills were used in the creation of this project.	Some evidence that higher level thinking skills were used in the creation of this project.	Clear evidence that higher level thinking skills were used in the creation of this project.
15	**Subject Knowledge**	Subject knowledge is not evident. Information is confusing, incorrect, or flawed.	Some subject knowledge is evident. Some Information is confusing, incorrect, or flawed.	Subject knowledge is evident in much of the project. Most information is clear, appropriate, and correct.	Subject knowledge is evident throughout the project. All information is clear, appropriate, and correct.
16	**Consideration for Diverse Learners**	No consideration given to special needs of diverse learners.	Design of software is not consistent with elements to meet special needs of diverse learners.	Special needs of learners are addressed with software design principles.	Special needs of learners are addressed with software design principles. A link is provided to describe these considerations and modifications

Assessment #5
Student Data
N=14

		Criteria				
			Unacceptable	Needs Work	Acceptable	Exemplary
	1	**Technical**			10	4
	2	**Navigation**			9	5
	3	**Spelling & Grammar**				14
	4	**Completion**				14
	5	**Screen Design**			11	3
	6	**Use of Enhancements**			12	2
	7	**Organization**			3	11
	8	**Activities**			2	12
	9	**Citing Resources**				14
	10	**Permissions Obtained for Resources not Created by the Author**				14
	11	**Originality**				14
	12	**Curriculum Alignment**				14
	13	**Evidence That Content Standards & Objectives Were Met**				14
	14	**Depth & Breadth of Project Content**			10	4
	15	**Subject Knowledge**				14
	16	**Consideration for Diverse Learners**			10	4

NOTE: All projects are returned to students until all dimensions are considered acceptable or exemplary.

Assessment 6
Hardware and Networking Technology
Performance Assessments
Narrative

Description of Assessment and Use in the Program:

This project is required in the second of the three courses required for the Educational Technology Facilitator certification. The student is required to demonstrate technology skills required of a technology facilitator at the school site. To do this, a series of performance assessments must be accomplished.

ETEC 650 – Educational Telecommunications, Network and the Internet is often referred to as the 'hardware' course. In this project based course, students effectively build a network from beginning to end. Students are given a test computer that they must first make functional by installing RAM and network cards. They are then required to install an operating system and a variety of software to the computer. Next, they are required to build network cables. Students then create peer to peer networks using networking cables. Networking devices such a hubs, switches and routers are introduced and students build simple networks using file sharing. At least two networking softwares are introduced and students must configure each piece of networking software to create user accounts and shared network drives. Networked software is installed and the management of this network software is accomplished. Ultimately, each networked computer must be configured and attached to the Internet.

Students are required to build, configure and maintain their assigned test computer until each of the tasks are accomplished. This takes longer for some students than others, but all must ultimately be successful to move to the next task. These activities are punctuated with appropriate course discussion about how computers and network work and communicate.

Standards Addressed:

TF-I.B
TF-II.A,B,C,D,E
TF-V.C,D
TF-VI.B
TF-VII.A,B

Data Analysis:

The philosophy that it is more important for students to successfully complete all aspects of a project coupled with low student – teacher ratio in classes results in all enrolled students successfully completing the performance based tasks for this assessment. In keeping with the permeating philosophy of the Educational Technology Leadership Masters program these performance assessments will be accomplished in turn, to allow each student to continue with the more advanced performance assessments with computers and networking technologies. The students must think critically and troubleshoot their computer and software until the problem is solved – which demonstrates a real world setting for computer technology facilitation at the school site.

Implications from Data Analysis:

Because each candidate has successfully completed this project, it indicates that students have met the standards assessed by this instrument. Of particular note are the advanced technology competencies required of standard TF-VII – Procedures Policies, Planning and Budgeting for Technology Environments.

Assessment #6
Hardware and Networking Technology
Performance Assessments

Performance	Not Accomplished	Accomplished
Desktop Computer		
Identify internal parts of a Computer		
1. Memory Boards		
2. Processor Chip		
3. Hard Drive		
4. Floppy Drive		
5. Motherboard		
6. Network Card		
Install Operating System		
Install Desktop Software		
Troubleshoot desktop networking problem		
Network Cables		
Identify Cable Types		
Build straight through network cable		
Build crossover network cable		
Networking Devices		
Identify and describe uses of Network Card		
Identify and describe uses of Network Hub		
Identify and describe uses of Network Switch		
Identify and describe uses of Network router		
Network Server		
Set up User Account		
Set up Shared drives		
Install networked devices		
Install and configure networked software		
Troubleshoot network problem		

Student Assessment Data for
Hardware and Networking Technology
Performance Assessments

Performance	Not Accomplished	Accomplished
Desktop Computer		
Identify internal parts of a Computer		9
1. Memory Boards		9
2. Processor Chip		9
3. Hard Drive		9
4. Floppy Drive		9
5. Motherboard		9
6. Network Card		9
Install Operating System		9
Install Desktop Software		9
Troubleshoot desktop networking problem		9
Network Cables		
Identify Cable Types		9
Build straight through network cable		9
Build crossover network cable		9
Networking Devices		
Identify and describe uses of Network Card		9
Identify and describe uses of Network Hub		9
Identify and describe uses of Network Switch		9
Identify and describe uses of Network router		9
Network Server		
Set up User Account		9
Set up Shared drives		9
Install networked devices		9
Install and configure networked software		9
Troubleshoot network problem		9

Assessment 7
School Site Technology Plan
Narrative

Description of the Assessment and Use in the Program:

This project is designed to demonstrate an understanding of the role of a technology facilitator in schools. Networking technologies, Software acquisition, User support and Faculty Development along with a demonstration of student competency in designing, supporting and upgrading networked environments are integrated into this planning project.

Educational Technology students are required to directly interact with their own schools and teaching environments and work to support those teachers at their home institution to effectively accomplish this project-based activity. Strategies for technology enhanced curriculum with technology infused instruction along with appropriate and responsive faculty development allow the student to gain insight and vision into the planning process. The alignment of school, district, state and national technology standards will guide this process. Schools often embrace students enrolled in this course and implement the plan upon completion.

Students are required to demonstrate an understanding of the current technology situation at their school and propose strategies for more efficient organization of existing software, equipment and services along with long term planning for upgrade of these areas. The student must also provide consideration for the appropriate uses of technology to support instruction and to address the diverse needs of learners.

Standards Addressed:

TF-I.B
TF-II.A,C,D,E
TF-III.A,B
TF-IV.B,C
TF-V.A,B,C,D
TF-VI.A,B,E
TF-VII.A,B,C
TF-VIII.B,C

Data Analysis:

In keeping with the philosophy of the Educational Technology Leadership Masters program this project will be returned to the student for revision until it is considered acceptable or exemplary. The act of revising a project until it is considered acceptable is considered to be of more value to the student than devising an assessment instrument that would return a range of scores. Ideally, all students would develop exemplary products and understand that a project is not finished until it is at least in good working order and acceptable for use. This philosophy coupled with the low student – teacher ratio in classes results in all enrolled students successfully creating a comprehensive plan to technology management and faculty development at their schools. These plans are often adopted by the school for use.

Implications from Data Analysis:

Because each candidate has successfully completed this project, it indicates that students have met the standards assessed by this instrument. Of particular note are the advanced technology planning and administration aspects required of standard TF-VII – Procedures Policies, Planning and Budgeting for Technology Environments.

Assessment #7
Technology Plan Project

1. Philosophical Statement. This could be a Vision, Mission, or Purpose statement. It should be a statement that appropriately describes your school's philosophy and supports the goals and objectives to be developed as part of the technology plan. This statement may be the hardest to write. Once stated, the rest of your plan should address what is described here.

2. Curriculum Integration. A formal statement of goals, objectives and identifiable outcomes (linked to assessment) with regards to how technology will be integrated into the curriculum. Address such questions as: How does this technology plan intend to address integration of technology into the curriculum? What are the goals and how will they be addressed?

3. Faculty/Staff Development.   This is a critical component to the efficacy of the plan. The Faculty/Staff Development component of the plan will **serve as grading criteria for ETEC 665** and should be developed accordingly.

4. Facilities/Resource. An assessment of current facilities and resources should be included along with a plan for any modifications, expansions and acquisitions. For those who have taken ETEC 650, please use the plan you developed as the majority of this portion. For those who have not taken ETEC 650, you will develop a skeleton of this component that you will revisit in ETEC 650.

5. Evaluation. Measures for determining if your efforts are effectively addressing your technology plan stated goals should be included in this component. The evaluation plan should collect and interpret both formative and summative assessment data.

6. Timeline. You may choose a 3- or 5- year implementation plan. Create a timeline that is appropriate. For those who have taken ETEC 650, you should use the timeline you have already developed and add to it for the other components of the plan (e.g. integration timeline and faculty development activities).

7. Budget. This should encompass all of the above. You should address money for faculty development, facilities/resources, evaluation and even a timeline. Not all monies are acquired within one year. For those of you who have taken ETEC 650, you may choose to incorporate your developed budget into the overall budget for this plan.

8. Policies. Include technology policies relevant to your educational setting. Examples: Student Use Policy; Faculty Use Policy; District Provision Policy

You are not limited to the above sections. This list may serve as a minimum guide.

Deliverables:
1. A website that serves as your formal presentation. An electronic copy of your website are to be submitted for grading.
2. A presentation, approximately 5-10 minutes in length, that explains your project.

Faculty Development Plan Project

Sections to Include:

1. Philosophical Statement. This could be a Vision, Mission, or Purpose statement. It should agree with the overall vision/mission/philosophy statement of the overall Technology Plan. Once stated, the rest of your plan should address what is described here.

2. Overview of Faculty Development Strategies. A statement of goals and strategies with regards to how faculty development will support the integration of technology into the curriculum. Discuss which types of activities and strategies (i.e. workshops, learning teams, mentors) will be utilized. Be sure to provide strategies for everyone within the various stages of the change process. Address such questions as: How does this faculty development activity address integration of technology into the curriculum? What are the goals of this activity, who will participate, who will be responsible?

3. Assessment. Measures for determining if your efforts are effectively addressing your faculty development plan stated goals should be included in this component. The evaluation plan should collect and interpret both formative and summative assessment data.

4. Timeline. You may choose a 3- or 5- year implementation plan. Create a timeline that is appropriate. It would be useful to show the correlation between integration effors and faculty development strategies the support these efforts (e.g. integration timeline and faculty development activities).

5. Budget. Be sure to include how much this will cost. You should provide a small yearly budget in the faculty development section and include these estimated numbers in the overall budget forecast.

6. Resources. Include examples and resources to facilitate the understanding and implementation of your plan. Many resources exist so this should be a a task that requires you to descriminate between resources and provide examples of those most useful to your faculty development plan. These resources may be listed in context with the strategies and may also be listed in a separate resource section of your site.

You are not limited to the above sections. This list may serve as a minimum guide.

Deliverables:
1. A website that serves as your formal presentation. An electronic copy of your website are to be submitted for grading.
2. A presentation, approximately 5-10 minutes in length, that explains your project.

Assessment #7
Assessment Checklist for Technology Planning Project

	Acceptable (falls within guidelines of overall plan)	Needs Improvement (does not fall within guidelines of overall plan – note problem)
Technology Plan		
Philosophical Statement		
Curriculum Integration		
Faculty/Staff Development (overview)		
Facilities/Resource		
Evaluation		
Timeline		
Budget		
Policies		
Faculty Development Plan		
Philosophical Statement		
Overview of Faculty Development Strategies		
Assessment		
Timeline		
Budget		
Resources		

Note: Students revise all items until acceptable.

Assessment #7
Assessment Checklist for Technology Planning Project

N=9

	Acceptable (falls within guidelines of overall plan)	Needs Improvement (does not fall within guidelines of overall plan – note problem)
Technology Plan		
Philosophical Statement	9	
Curriculum Integration	9	
Faculty/Staff Development (overview)	9	
Facilities/Resource	9	
Evaluation	9	
Timeline	9	
Budget	9	
Policies	9	
Faculty Development Plan		
Philosophical Statement	9	
Overview of Faculty Development Strategies	9	
Assessment	9	
Timeline	9	
Budget	9	
Resources	9	

Section V – Use of Assessment Results to Improve Candidate and Program Performance.

Principal Findings

While compiling this report, the author of the ISTE ELF SPA found that our program is very strong in many respects but may benefit from additional assessment to guide student growth in certain areas. Based on a summary of the assessment data collected through this report, a discussion of matters will be addressed. Each of the following areas provides 1) evidence of how we have used assessment results to address student development and/or 2) our planned efforts to use the assessment data.

Content Knowledge

All students seeking the Educational Technology Facilitators add on endorsement must first posses a teaching certificate. Prerequisite to entering the first course in the sequence, students must demonstrate competencies in word processing, graphics, a general knowledge of internet navigation and email. Additionally, students are expected to posses the general skills and proficiency in most of the NETS-T and NETS-S standards. These skills that support technology use in instructional settings are almost always acquired through successful completion of the Louisiana INTECH training program available to all teachers in Louisiana. All of the students entering this program had this experience. The initial screening interview that has taken place for the past 5 years has quickly identified whether students have successfully completed this mandated state training.

With the redesign of this program, the Advanced Programs Survey was devised that focuses on Technology Use. It is expected that this survey will reveal not only skills upon entrance to the program, but track skills development and changes in student practice as students accomplish the 9 hours of coursework in the Educational Technology Facilitators endorsement.

Pedagogical and Professional Knowledge, Skills and Dispositions

All Educational Technology endorsements and degree programs embrace the use of projects as major activities and assessments. The low student – teacher ratio in courses coupled with the small number of students in the program allow faculty to mentor students in developing the skills and experiences required to become an effective Technology Facilitator. To this end, students are required to revise products and projects until they accomplish the task at hand, are considered in good working order and acceptable in all dimensions. This mirrors the real world, where critical thinking, problem solving and perseverance are critical skills for Technology Facilitators as they serve their schools, faculty and students. This has proved to be successful practice, as demonstrated by enrolled students successfully completing course projects.

The didactic activities of the Educational Technology Facilitators endorsement coursework are project based, with each project designed for the student to investigate the situation in their own educational setting, and often requiring an implementation and assessment for efficacy. This focus requires the student to use content knowledge along with pedagogical and professional knowledge to design and implement effective practice.

While each project within the certification coursework and within the program is designed to address multiple areas of content knowledge as identified by the ISTE standards; the projects the students design and implement reflect these areas of content knowledge. The projects are both proscriptive and flexible in design, allowing the student to adapt their projects to their unique educational setting.

Effects on Student Learning

In the three courses required for this endorsement, students create a school or classroom website, develop a fully functioning web-based piece of instructional software, demonstrate their ability to build and rebuild computers and networks from component parts, assess current school technology resources and devise plans for hardware and software acquisition while devising appropriate faculty development programs. Additionally, through the action research cycle, students are required to collect data about their school and its performance, identify a weakness or area of concern and then devise and implement a plan for investigation of a practice to address this weakness or area of concern, collect data, analyze results and then present this data to stakeholders at their school to inform decision making. Each of these activities directly impacts student learning

Candidates in the program are required to maintain an electronic portfolio of work that is focused on demonstrating their content knowledge, along with demonstrations of the pedagogical and professional knowledge, skill, and dispositions they possess, each of which serves to describe and validate their ability to impact student learning while proscribing effective environments that support learning.

Overall comments on Assessment of Educational Technology Facilitators endorsement

The Master of Education in Technology Leadership has as its culminating event a portfolio defense. This defense provides not only a summative assessment of the performance of the student, but a vehicle to review the components of the program and the contribution each component makes to the overall preparation of the student.

To date, all students enrolled in the endorsement coursework for Technology Facilitator have elected to continue until they achieve the Educational Technology Leader certification and ultimately the Masters of Education in Technology Leadership. Basically, the Educational Technology Leadership endorsement was the sought after

endorsement, with the Facilitators endorsement an additional benefit garnered along the way.   Because of this, candidate portfolio defense is usually done at the end of the didactic portion of the program. As a result of the development of this SPA for Educational Technology Facilitator, faculty who teach in the program are considering requiting an intermediate and formative portfolio defense be required of students as they finish the 9 hours of coursework for the Educational Technology Facilitators endorsement. This would coincide with the second administration of the Advanced Programs Survey – Technology Use. An addition of this assessment gate could provide formative data to address any weaknesses that may exist as students are in the early to mid stages of their coursework.

Through the cumulative review of program activities and projects as reflected by the defense of the formal portfolio of student work, both faculty and students are required to review the requirements and activities of the program as experienced by each student. Additionally, faculty collectively review the common experiences of all students within this program and determine any revision or expansion of activities to ensure the didactic strategies reflect and produce candidates that possess the knowledge and dispositions as required by national, state and university standards.

In conclusion, in this redesigned program, the implementation of the Advanced Program Survey and the addition of a formative assessment of the electronic portfolio are intended to provide quality data to allow the refinement of instructional focus and practice to best serve the needs of the student as they work to become well prepared technology facilitators. The faculty will continue to evaluate the progress of the redesigned program and adjust with changes as instructional concerns are identified.

ONE	TWO	THREE	FOUR
TF-I.A	TF-I.A,B	TF-I.B	TF-II.A,B,C,D,E,F
TF-II.A,C,F	TF-II.A,C,F	TF-II.A,B,C,F	TF-III.A,B,C,D,E
TF-III.A,B,C,D,E	TF-III.A,B,C,D,E	TF-III.A,B,C,D,E	TF-IV.A,B,C
TF-IV.A,C	TF-IV.A,C	TF-IV.A	TF-V.B,C,D
TF-V.A,B,C,D	TF-V.A,B,C,D	TF-V.A,C,D	TF-VI.B,C,D,E
TF-VI.B,C,D,E	TF-VI.B,C,D,E	TF-VI.A,D,E	TF-VIII.A,D
TF-VII.A,B	TF-VII.A,B		
TF-VIII.A	TF-VIII.A		