TOURO COLLEGE GRADUATE SCHOOL OF EDUCATION

Master of Science in Instructional Technology

Overview

The Master of Science in Instructional Technology is a systematic graduate-level study program designed for individuals who wish to become dynamic and innovative leaders in the field of instructional technology, whether they are in the private or academic sector. The program prepare instructional technology professionals with a strong theoretical base and practical hands-on experience in the design, development, implementation, management, and evaluation of leading-edge educational technologies and to provide students with the knowledge, skills, and experiences to become successful practitioners and leaders in the field of Educational Technology in schools (K-12), colleges, universities, or in business/industry settings.

Specifically, this program is designed to prepare professionals who will:

- Utilize current and emerging technology to improve the teaching and learning processes,
- Develop a systematic approach toward designing, developing, implementing, managing, and evaluating the integration of technology into instruction,
- Respect diversity among individuals and assign to the highest level of ethical standards and practice in the field of instructional technology,
- Conduct research and needs analysis to ensure effective design of technology-related instructional materials.

The Instructional Technology Program at Touro College is a unique program offering a strong blend of instructional theory combined with practical, hands-on, technical skills that will help students apply effective instructional strategies that utilize the technologies of both today and tomorrow.

Key Assessments

Prior to the release of CAEP's Standards for Advanced Certification Programs, the faculty of the Instructional Technology program had structured its curriculum around the standards of its SPA, the International Society for Technology in Education (ISTE). As part of our transition from TEAC to CAEP, we began to shift the alignment of our courses and our assessments from those ISTE Standards to the standards promulgated by the New York State Department of Education (NYSED) and CAEP's Standards for Advanced Certification Programs.

Based on this shift in focus, several courses are being revised and re-purposed. As a result, the rubrics we use for assessment are also being revised and, in some cases, completely rewritten.

The new mapping led the faculty to also develop a set of key assessments designed to address CAEP Advanced Program Standard A1.1. These key assessments are:

1. Observation of Clinical Experience (Practicum)
A practicum experience of at least 50 hours duration is required for the Technology Specialist candidate to qualify for certification, according to New York State Education Department (NYSED) regulations. The Instructional Technology program incorporates this practicum within its capstone course, EDIN 692. Using a rubric, program faculty members observe candidates twice during their practicum, as they introduce and work with students using innovative technologies within a carefully developed project, usually within their area of specialty.

2. A final research project with data analysis
Another assessed component of the capstone course revolves around a research component of the practicum project. Candidates are required to develop proposals for their classroom projects within a rigorous protocol of academic research. Candidates justify their projects and the research as innovative, supporting the advancement of technology use in the classroom. Rubrics are being revamped to evaluate the project proposals and the candidate's final presentation summarizing the project. And other rubrics are being developed to assist the faculty in assessing the quality of candidates' research methods.

3. The State of New York Content Specialty Test (071)
While candidates can successfully complete the Masters program without taking this test, it is required by the State of New York for certification as an Instructional Technology Specialist. Consequently, candidate performance on this test is an important measure of the program's success in preparing candidates for that role.

4. A Pre-post test on Digital Citizenship
The Internet has become a central force in communications, commerce, education, and human relationships in today's world. No one can considered to be educated today without understanding what it means to be a digital citizen. Therefore, one of

the pillars of the New York State Competency Standards for Instructional Technology Specialists focuses on teaching digital citizenship. Aspects of this broad field have been incorporated into all of our courses, so we have developed a rigorous pre-post test, carefully aligned to the components of the State standard, to assess the success of the program in teaching Digital Citizenship.

5. A Professional Disposition Evaluation

A Professional Disposition Evaluation is a rubric-based assessment of candidate competency conducted by faculty, early in the candidate's tenure in the program and then some time later on. We are considering using this evaluation as a tool for candidate self-evaluation as well. The evaluation instrument and accompanying rubric were adapted from tools developed by the Department of Teaching, Leadership and Counseling at Northwester State University of Louisiana.

Criteria for Success

The classroom practicum and the academic research project, accomplished in the final year of the program, contain multiple assessment points. The first occurs during the proposal stage, in which the faculty evaluates candidates' project proposals using a rubric that is currently being revised (see appendix B). Once the faculty approves the proposals, candidates begin planning for the projects' classroom implementation, as well as preliminary data collection. Used for two observations of each project, The Classroom Observation rubric (see appendix A) is based on a three-point scale: Proficient, Developing and Emergent, with the corresponding point values of 5,3,and 1. Following the projects' implementation, candidates make a final presentation to a faculty panel that uses the Presentation Rubric that is currently being revised.

Another key assessment, the Pre-post test on Digital Citizenship, contains 50 multiple-choice questions (see appendix C) carefully aligned with New York State Competency standards on Digital citizenship. Candidates are required to achieve a score of at least 80% to pass.

All candidates are expected to maintain a benchmark GPA of 3.0. When a candidate falls below that indicator, the program chairperson consults with and councils that candidate and, if necessary, in extraordinary instances, removes the candidate from the program.

A Culture of Continuous Improvement

The Instructional Technology Program has always operated with the belief that we must constantly examine our candidates' results on the New York State Certification Exam and take steps to revise aspects of the program's courses when needed. In 2014, the State significantly modified the Exam, but for two years gave candidates the option of taking the old exam, termed a Safety Net exam. In response to the change, The Instructional Technology program has modified aspects of all of its courses and added a specific course that is structured to expose candidates systematically to key conceptual areas of the new exam. As we continue to track the preparedness of our candidates as measured by their success on the State Exam, we fully expect that we will need to make additional changes along the way to ensure that the program provides candidates with optimal course offerings and opportunities for success.

In our ongoing effort to monitor and improve the program, we also employ two assessments each semester to monitor student and faculty satisfaction with and opinions about courses being taught: an online student course evaluation and a faculty self reflection based on data accompanied by a future action plan for each course taught.

ASSESSMENT TOOLS

The following documents in Appendices A, B and C are a selection of the rubrics and test used for some of the program's key assessments.

Appendix A

Touro College
Master of Science In Instructional Technology
*Classroom Observation Rubric**

	Proficient	***Developing***	***Emergent***	***Comments***
Introduction	The candidate chooses an activity that includes **all** of these: • Piques student interest • Builds on prior knowledge • Sets a purpose for the lesson • Promotes the use of technology	The candidate chooses an activity that includes **three** of these: • Piques student interest • Builds on prior knowledge • Sets a purpose for the lesson • Promotes the use of technology	The candidate chooses an activity that does **two** of these: • Piques student interest • Builds on prior knowledge • Sets a purpose for the lesson • Promotes the use of technology	
Goals and Objectives	The candidate clearly defines the goals and objectives of the lesson. The goals and objectives are performance based	The candidate clearly defines the goals and objectives of the lesson but they are not performance based	The candidate does not clearly define the goals and objectives of the lesson and they are not performance based	
Research Based Learner Centered Strategies	The candidate creates and models the lesson based on a variety of tools including: • Research based strategies • Learner centered instructional strategies	The candidate creates and models the lesson on **one** of the following: • Research based strategies • Learner centered instructional strategies	The candidate does not create and model the lesson on **any** of the following: • Research based strategies • Learner centered instructional strategies	
Content Standards and Student Technology Standards	The candidate models, designs, and implements technology enhanced learning experiences that • Address content standards • Address student technology standards.	The candidate models, designs and implement technology enhanced learning experiences that address **one** of the following: • Content standards • Student technology standards.	The candidate **does not** model design or implement technology enhanced learning experiences.	

** This rubric was developed by the faculty of the Instructional Technology Program, Touro Graduate School of Education and Graduate School of Technology, New York, 2017*

Use of Technology	• The candidate consistently models and uses technology as a presentation and encourages students to do the same. • The candidate models and facilitates the safe, healthy, legal and ethical uses of technology.	• The candidate models and uses technology in activities, but does not encourage students to do the same. • The candidate models and facilitates the safe, healthy, legal and ethical uses of technology.	• The candidate only uses technology as a presentation tool. • The candidates do not model and facilitate the safe, healthy, legal and ethical uses of technology.	
Using Technology for Productivity	The candidate asks students to use technology to accomplish the following tasks: • Complete assignments • Perform investigations • Share materials	The candidate asks students to use technology to accomplish **two** of the following tasks: • Complete assignments • Perform investigations • Share materials	The candidate asks students to use technology to accomplish **one** of the following tasks: • Complete assignments • Perform investigations • Share materials	
Higher Order Thinking Skills	The candidate uses **all** of the following methods to promote higher order thinking skills: • Candidate poses open ended questions for discussion • Learning activities that enable students to think critically about issues that are relevant to them • Activities allow students to learn independently	The candidate uses **two** of the following methods to promote higher order thinking skills: • Candidate poses open ended questions for discussion • Learning activities that enable students to think critically about issues that are relevant to them • Activities allow students to learn independently	The candidate uses **one** of the following methods to promote higher order thinking skills: • Candidate poses open ended questions for discussion • Learning activities that enable students to think critically about issues that are relevant to them • Activities allow students to learn independently	
Independent/ Guided Practice	The candidate: • Explains how the students will interact with the new content and technology • Circulates around the room to assist students • Makes sure all students are actively engaged in the independent practice	The candidate only does **two** of these: • Explains how the students will interact with the new content and technology • Circulates around the room to assist students • Makes sure all students are actively engaged in the independent practice	The candidate only does **one** of these: • Explains how the students will interact with the new content and technology • Circulates around the room to assist students • Makes sure all students are actively engaged in the independent practice	

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Diverse needs of learners/differentiated instruction	• There are many types of strategies and technology tools used in the lesson to meet the needs of diverse learners. • The candidate uses technology based on IEP requirements	• There are at least **two** teaching strategies and technology tools used in the lesson to meet the needs of diverse learners. • The candidate uses technology based on IEP requirements	• There is only **one** strategy or technology tool used in the lesson to meet the needs of diverse learners. • The candidate uses technology based on IEP requirements	
Assessment	• The candidate creates and implements varied forms of summative assessments that incorporate technology. • Candidate and student created rubrics are used for assessment.	• The candidate creates and implements **one** form of summative assessment that incorporates technology AND • Uses candidate and student created rubrics for assessment.	• The candidate creates and implements **one** form of summative assessment that incorporates technology OR • Uses candidate and student created rubrics for assessment.	
Conclusion/Extension Activities	• The candidate reviews the goals and objectives with students • Students and candidate collaboratively decide if the goals and objectives were met • Students who did not meet the goals and objectives are identified for group work/additional support	• The candidate reviews the goals and objectives with students • Only the candidate decides if the goals and objectives were met • Students who did not meet the goals and objectives are identified for group work/additional support	• The candidate reviews the goals and objectives with students • Only the candidate decides if the goals and objectives were met • Students who did not meet the goals and objectives are given homework rather than additional support	

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Appendix B

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*Final Project Presentation Rubric**

Part 1 - Mechanics

	Developing	Approaching	Meets	Exceeds
Layout	The layout is confusing Slides are overcrowded with text The format of the slides is not uniform	The layout is not confusing Slides are overcrowded with text The format of the slides is not uniform	The layout is pleasing to the eye Some of the slides are overcrowded with text The format of the slides is almost always uniform	The layout is pleasing to the eye The slides are not overcrowded with text The format of the slides is always uniform
Text/Appearance	The text is hard to read and detracts from the presentation The font size is either too large or too small to read comfortably The text is hard to read against the background	Some of the text is easy to read but the majority of text is obscured The font size is either too large or too small to read comfortably Some of the text is hard to read against the background	Most of the text is easy to read but some text is obscured Font sizes are generally appropriate The background complements the text	Text is easy to read and enhances the presentation Font sizes are appropriate The background complements the text

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	Developing	Approaching	Meets	Exceeds
Graphics/Slides/Animations/ Transitions	Graphics are not integral to the content/ nonexistent/superfluous Graphics/animations do not load automatically Transitions are not smooth Transitions detract from the presentation	Graphics are not always integral to the content/ detract from the presentation Some graphics/animations do not load automatically Transitions are not always smooth Some transitions detract from the presentation	Most of the graphics are integral to the project and enhance the presentation Most graphics/animations load automatically Transitions are smooth Transitions enhance the presentation	Graphics are integral to the project/enhance and reinforce the project All graphics/animations load automatically Transitions are smooth Transitions enhance the presentation
Spelling/Grammar	There are three or more spelling and/or grammar errors	There are two or more spelling and/or grammar errors	There is one spelling or grammar error	There are no spelling and grammar errors
Technical Issues (sound, video, error messages)	Project does not run well – there are many technical issues	Project runs with some technical issues	Project runs adequately with only minor technical issues	Project runs well with no technical issues
Overall Presentation/ Delivery	The presentation did not keep the interest of the viewer The presenter did not seem comfortable delivering the presentation The presenter read the slides There was little or no eye contact with the audience	The presentation did not always keep the interest of the viewer The presenter did not seem comfortable delivering the presentation The presenter read most of the slides The presenter did not always make eye contact with the audience	The presentation kept the interest of the viewer The presenter was comfortable during the presentation but did not speak in an authoritative manner The presenter read some of the slides The presenter did not always maintain eye contact with the audience	The presentation kept the interest of the viewer The presenter was comfortable during the presentation and spoke in an authoritative manner The presenter did not read the slides The presenter maintained eye contact with the audience

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Part 2 Content

Final Project Presentation Rubric
Part 2 - Content

	Developing	Approaching	Meets	Exceeds
Description of the Project	The description of the project is missing one or more of the required elements. There is a limited description of the project The description includes few details of how technology enhanced the project and presentation	The description of the project includes all of the required elements but some elements are not clear. There is a brief description of the project The description includes some details of how technology enhanced the project and presentation	The description of the project includes all of the required elements in a clear manner. Goals and objectives There is an adequate description of the project The description includes details of how technology enhanced the project and presentation	The description of the project includes all of the required elements in a clear and concise manner. There is a well developed description of the project The description includes specific details of how technology enhanced the project and presentation
Introduction	The student can not convey in their own words what the project/presentation is about	The student can not clearly convey in their own words what the project/presentation is about	The student can convey in their own words what the project/presentation is about	The student can clearly convey in their own words what the project/presentation is about
Goals and Objectives/Standards	The goals and objectives of the project are missing or inappropriate	The goals and objectives of the project are present but are not clear	The goals and objectives of the project are clear and appropriate	The goals and objectives of the project are appropriate and clearly defined

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Student starts presenting here				
	Developing	**Approaching**	**Meets**	**Exceeds**
Subject Knowledge/Content	Knowledge of the subject matter is not evident Content is not presented in a clear and logical manner Information is not clear, incorrect or missing There are little or no examples, facts, statistics to support the goals and objectives Content standards are missing or inappropriate	Knowledge of the subject matter is vague Content is sometimes presented in a clear and logical manner Some information is not clear or incorrect There are a limited number of examples, facts, statistics to support the goals and objectives Content standards are included but are not appropriate for the project	Knowledge of the subject matter is evident Content is presented in a clear and logical manner Most of the information is clear and appropriate There are some examples, facts, statistics to support the goals and objectives Content standards are appropriate and clearly stated	Knowledge of the subject matter is evident Content is presented in a clear and logical manner Information is very clear and appropriate Examples, facts, statistics clearly support the goals and objectives Content standards are appropriate, clearly stated and relate to the project
Creativity	The presentation is repetitive with no variation The presentation shows little evidence of originality	There is very little variation of materials presented The presentation shows some evidence of originality	There is a some variety of materials presented The presentation shows evidence of originality	There is a great deal of variation in the materials presented The presentation shows evidence of originality

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	Developing	Approaching	Meets	Exceeds
Use of Technology	The presentation shows a limited understanding of the technology used for the project Project displays little technology to showcase the work of students The technology used does not enhance the presentation Technology standards are missing or inappropriate	The presentation shows a basic understanding of the technology used for the project Project displays some forms of technology to showcase the work of students The technology used does not always enhances the presentation Technology standards are included but are not appropriate for the project	The presentation shows a good understanding of the technology used for the project Project displays multiple forms of technology to showcase the work of students The technology used enhances the presentation Technology standards are appropriate and clearly stated	The presentation shows a comprehensive understanding of the technology used for the project Project displays many forms of technology to showcase the work of students The technology used clearly enhances the presentation Technology standards are appropriate, clearly stated and relate to the project
Organization	Information is not organized in a clear and logical manner Sequence of information is not logical	Some information is presented in a clear and informative manner Sequence of information is not always logical	Information is organized in a clear manner Sequence of information is generally logical	Information is organized in a clear and consistent manner Sequence of information is logical
Assessment/Project Evaluation	The presentation does not include an appropriate assessment that relates to goals and objectives There are inappropriate assessment tools in place to evaluate student performance	The presentation does not include an appropriate assessment aligned to project goals There are some appropriate assessment tools in place to evaluate student performance	The presentation includes an assessment aligned with project goals There are assessment tools in place to evaluate student performance	The presentation includes an assessment that is clearly aligned with project goals There are appropriate assessment tools in place to evaluate student performance

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	Developing	Approaching	Meets	Exceeds
Conclusion	The outcome of the project is not clear There is no explanation of why the project worked or why it did not work. The conclusion is not directly linked to the goals and objectives of the project There is no articulation as to whether or not the project was successful The conclusion is not based on relevant information There is no supervisory documentation and no student artifacts	The conclusion is not clear but restates the objective of the project. There is a brief explanation of why the project worked or why it did not work. The conclusion is not directly linked to the goals and objectives of the project The conclusion does not clearly articulate if the project was successful The conclusion is based on some relevant information There is either supervisory documentation or student artifacts but not both	The conclusion is clear and restates the objective of the proposal. There is not an adequate explanation of why the project did or did not work The conclusion is clear and is linked to the goals and objectives of the project The conclusion articulates the success of the project The conclusion is based mostly on relevant information There is supervisory documentation and some student artifacts	The conclusion is clear and restates the objective of the proposal. There is a clear explanation of why the project did or did not work The conclusion is clearly linked to the goals and objectives of the project The conclusion clearly articulates the success of the project The conclusion is based on relevant information There is satisfactory supervisory documentation and many student artifacts
References/Citations	Sources are not properly cited The presentation does not give credit to the sources of material used including video, graphics, websites and articles	Few sources are properly cited The presentation does not give credit to some sources of material used including video, graphics, websites and articles	Many sources are properly cited The presentation credits many sources of material used including video, graphics, websites and articles	All sources are properly cited The presentation gives credit to all sources of material used including video, graphics, websites and articles

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Appendix C

Touro College
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Sample questions
from the Pre-test/Post-test on Digital Citizenship*

- Total Questions: 50
- The correct answers have **bold** numbers

Mike is taking a test in the morning and uses his phone to photograph and then share the test with John, who is taking the test that afternoon. As Mike's teacher, what should you do when you discover what Mike has done?

1. Tell Mike that he will get a 0 on the test.
2. Send Mike and John to the school principal to be disciplined.
3. Contact each boy's parents to let them know about the incident.
4 All of the above.
5. I don't know the answer.

(State Standard 3.01)

Even though it is against the school's acceptable computer use policy, Mr. Scott, a librarian, catches a student at a library workstation on a music site that requires a credit card to purchase music. What is his best course of action?

1. Ignore the student's infraction of the policy because he doesn't agree with it.
2. Scold the student for breaking the rules and ask her to leave the library.
3. Sit down with the student to check out her music choices.
4. Have a thorough discussion with the student about the school's acceptable computer use policy
5. I don't know the answer.

(State Standards 3.01, 3,06)

** This test was developed by the faculty of the Instructional Technology Program, Touro Graduate School of Education and Graduate School of Technology, New York, 2017. Ideas for questions were taken from "Digital Citizenship in Schools, Third Edition," by Mike Ribble, International Society for Technology in Education, 2015*

You notice that a student has his cell phone turned on all day during school hours. What do you tell him?

1. It's not a good idea because it might disturb the class.
2. You understand that he needs to keep in touch with his parents
3. You ignore it because it's no big deal. Everyone else does it.
4. You let the student know that it's really his choice if it doesn't affect anyone else.
5. I don't know the answer.

(State Standard 3.02)

A student, with a history of cyber bullying, sends a harassing text message to another student. The student who received the text retaliates with an equally cruel text. Other students line up taking sides on social media. The school authorities become aware of the situation. What is the most effective action they can take to make the situation better?

1. The school principal immediately speaks with both students and their parents as the first step to diffuse the situation.
2. The school authorities contact the local police department so that it is aware of the situation and will become involved.
3. School counselors hold in-depth discussion sessions about the implications of cyber bullying with groups of students from across the school.
4. All of the above.
5. I don't know the answer.

(State Standard 3.01, 3.02)

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