

## Changes Based on Data

### PROGRAM: M. Ed. in Curriculum and Learning (Concentration: Learning Technologies)

Name of Assessment	Results/Data	Changes Made To Date	Changes Planned To Date	How data is shared with faculty, candidates, and professional community
Assessment 1: Educational Technology Website, New Technologies Presentation & Trouble Shooting Guide	Overall, candidates in the 2007, 2008 and 2009 Fall semesters did well on all three assignments. All scored "Target" on three of the elements (1, 2, 10), and "Acceptable" and above on six other elements (3, 4, 6, 7, 8, 11). However, two of the elements from the New Technologies Presentation assignment (5, 7) proved harder for candidates in all years, with a number of them scoring Unacceptable on these items.	The instructor for this course noted that for element 5, candidates did not always incorporate the research study findings showing the positive effect of the technology they chose for their assignment. In the Fall 2010 semester, the instructor planned to have this more clearly discussed and examined in the class, since this is the first course candidates are supposed to take in the program.	Continued revision and improvement of course outcomes, especially as it relates to the upcoming new ISTE-TF standards.	Data charts are shared between the two faculty members who teach the Learning Technologies courses. Future sharing of data with candidates and the professional community will be explored.
Assessment 2: Course Grades in the Learning Technologies Concentration	Overall, candidates graduating in 2007-2008, 2008-2009 and 2009-2010 academic years did well. Since all the LT courses were revised in 2004, it is possible that courses	We planned to continue tracking and tweaking the LT course outcomes in line with ISTE/TF standards.	Continued revision and improvement of course outcomes, especially as it relates to the upcoming new ISTE-TF standards.	Data charts are shared between the two faculty members who teach the Learning Technologies courses. Future sharing of data with candidates and the professional

	<p>taken by a number of the candidates (especially those graduating before 2008) were not the most recent versions and were less rigorous in content. It is therefore not surprising to see grades go down in later years.</p>			<p>community will be explored.</p>
<p>Assessment 3: Lesson Plan Database Assignment and Teacher's Technology Skills Checklist</p>	<p>Overall, candidates in the Spring 2008, 2009 and 2010 semesters performed adequately. The large majority scored "Acceptable" or above in six of the elements (1, 2, 3, 5, 7, 9). For the first two years, the majority of candidates scored at "Acceptable" or below on elements 4, 6, and 8. On element 10, candidates all scored "Unacceptable" in 2010 when a different instructor taught this course.</p>	<p>The instructors met to discuss ways to improve all these scores in the Spring 2011 semester. This will be the second semester that the course will be taught by the instructor who did not develop this assignment and the current instructor is working to improve the way the material is taught and make the assessment more reliable.</p>	<p>Continued revision and improvement of course outcomes, especially as it relates to the upcoming new ISTE-TF standards.</p>	<p>Data charts are shared between the two faculty members who teach the Learning Technologies courses. Future sharing of data with candidates and the professional community will be explored.</p>
<p>Assessment 4: Technology Integration Virtual Mentoring Experience</p>	<p>This assignment was created in 2008, in response to the need for a field experience component in the Learning Technologies concentration. This field experience takes place in</p>	<p>When this class was offered in Fall 2010, the instructor worked more comprehensively with candidates on the requirements for ways to manage technology resources as well as</p>	<p>Continued revision and improvement of course outcomes, especially as it relates to the upcoming new ISTE-TF standards.</p>	<p>Data charts are shared between the two faculty members who teach the Learning Technologies courses. Future sharing of data with candidates and the professional community will be</p>

	<p>ELCL-611, which is only offered in the Fall semesters. In Fall, 2009, this course was cancelled due to low enrollment. Therefore there is only one semesters worth of data to report. Having noted this limited data, candidates in the Fall 2008 class overall did well on this assessment (a detailed breakdown of scores is in 5C, below) and there were no Unacceptable scores reported. In six of the eight elements, the majority of the candidates scored Target. However, on elements 4 and 5, all candidates scored Acceptable, with none scoring Target.</p>	<p>students' technology-based activities. The instructor also included a reflection paper this semester, that should be folded into the assessment moving forward.</p>		<p>explored.</p>
<p>Assessment 5: Chapters 1-5 of M.Ed. Thesis</p>	<p>Although the numbers are low, candidates consistently scored in the Acceptable or Target range, with no candidate scoring as Unacceptable. With the exception of the Spring 2010 semester (taught by an instructor who had not taught this course before), candidates</p>	<p>In the 2010-2011 academic year, we continued to work on helping students contextualize their research problem in the larger scholarship of educational technology.</p>	<p>Continued revision and improvement of course outcomes, especially as it relates to the upcoming new ISTE-TF standards.</p>	<p>Data charts are shared between the two faculty members who teach the Learning Technologies courses. Future sharing of data with candidates and the professional community will be explored.</p>

	<p>did especially well on the 3rd, 4th and 5th items (Methodology, Results and Discussion chapters). However, in most of the semesters, half the candidates only scored in the Acceptable range on the 1st and 2nd items (Literature Review, and Problem Statement chapters). This would indicate that although the candidates are proficient at doing the actual research, they are less able to contextualize their research in the larger scholarly domain, often not seeing how their findings fit within the 'bigger picture' of educational technology research.</p>			
<p>Assessment 6: Social, Ethical, Legal, and Safety Online Discussions</p>	<p>The results from the Fall 2007 semester made it clear that candidates were not meeting the expectations of this assignment.</p>	<p>In Fall 2008, the instructor revised the assignment to make it more clear to the candidates what was expected. In the subsequent two classes, this improved so that by Fall 2009, only one candidate scored an Unacceptable on only one</p>	<p>Continued revision and improvement of course outcomes, especially as it relates to the upcoming new ISTE-TF standards.</p>	<p>Data charts are shared between the two faculty members who teach the Learning Technologies courses. Future sharing of data with candidates and the professional community will be explored.</p>

		<p>of the items and the majority of the other scores were all in the Acceptable or Target range. In addition, this is a group assignment and as such is a bit trickier since each student's scores is dependent on their group-mates' efforts. For example, if a candidate's summarization and/or moderation of a discussion on the digital divide is unacceptable, then there is a very good chance that his/her group-mates' understanding of the issue will be uniformed and similarly unacceptable. We will be re-thinking this assignment in the future.</p> <p>NB: ELCL-605 is open to all students in the M.Ed. in Curriculum and Learning program, however only the scores of Learning Technologies candidates are reported below.</p> <p>Furthermore, placement in their online collaborative groups for this assignment is done randomly, so that the Learning Technologies</p>		
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		candidates may or may not be in the same group.		
Assessment 7: Technology Skills Rubric and Spreadsheet	Overall, candidates did well with only one score below "Acceptable". This assessment, together with Assessment #3 (Lesson Plan Database Assignment and Teacher's Technology Skills Checklist) can be used to meet the requirements for candidates' school districts to meet the New Jersey Technological Assessment For Proficiency And Integration (NJTAP-IN) and a number of students report being able to bring the expertise the gain from this assessment back to their districts.	Between 2008 and 2009, the instructor teaching this course revised her lecture notes in order to strengthen candidates understanding of the use of aggregated data to guide curriculum revision. As with Assessment 3, this will be the second semester that the course will be taught by the instructor who did not develop this assignment and the current instructor is working to improve the way the material is taught and make the assessment more reliable.	Continued revision and improvement of course outcomes, especially as it relates to the upcoming new ISTE-TF standards as well as NJDOE NJTAP-IN requirements	Data charts are shared between the two faculty members who teach the Learning Technologies courses. Future sharing of data with candidates and the professional community will be explored.
Assessment 8: Technology Grant Proposal	Overall, candidates in 2008 and 2009 did well. All scored "Acceptable" and above in six of the elements.	The assignment requirements were strengthened between 2008 and 2009, particularly for elements 5 and 9. Continued revision needs to be done to ensure that candidates can produce a rigorous and well-written proposal. The ELCL-625 course was not offered in Spring 2010 due	Continued use of the logic-model requirement. Continued revision and improvement of course outcomes, especially as it relates to the upcoming new ISTE-TF standards.	Data charts are shared between the two faculty members who teach the Learning Technologies courses. Future sharing of data with candidates and the professional community will be explored.

		to low enrollment but was offered in Fall 2010 with a new instructor. The new instructor added videos and a logic-model requirement to the project.		
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## **Learning Technologies SPA Report - Section V**

### **Use of Assessments Results to Improve Candidate and Program Performance**

#### **(1) Content Knowledge**

The content knowledge of candidates in the M.Ed. Learning Technologies program at William Paterson University is assessed through Educational Technology Website, New Technologies Presentation & Trouble Shooting Guide projects assigned in the entry course to the program, ELCL-605 (Assessment 1) as well as course grades received by candidates in the five (5) Learning Technologies mandatory core courses (Assessment 2).

**Principal Findings and Interpretation of the Findings:** Data from Assessments 1 and 2 demonstrate that candidates are gaining the content knowledge and skills expected of an Educational Technology Facilitator. All the Learning Technology courses, starting with ELCL-605 require that candidates use current information and communication technologies and at the same time that they think about themselves as technology leaders and this are apparent when viewing the Assessment 1 assignments and work done in the other courses.

**Program Changes Based on the Findings:** As a result of our analysis of the data, each year, we have been (and plan to continue) revising the assignments in the ELCL-605 and four other Learning Technologies courses to ensure that candidates are:

- familiarized with relevant and promising leading edge information and communication technologies - for example, the Trouble Shooting Guide previously required that candidates create this using a word processing program, but now they are required to create it using a weblog which can be updated as new versions of the technology they are providing the guide for are released.
- exposed to the most current theories and practices in the field of educational technology - for example, ELCL 605 now includes a discussion of the TPCK (Technological Pedagogical Content Knowledge) model.

#### **(2) Pedagogical and Professional Knowledge, Skills, and Dispositions**

The pedagogical knowledge, skills, and dispositions of candidates in the Learning Technologies program are evaluated through a Lesson Plan Database and Teacher's Technology Skills Checklist assignment (Assessment 3), a Tech-Integration Virtual Mentoring field experience (Assessment 4), Candidate-led Discussion Forums on Social, Ethical, and Legal Issues (Assessment 6), a Technology Skills Rubric and Spreadsheet assignment (Assessment 7), and a Technology Grant Proposal assignment (Assessment 8).

**Principal Findings and Interpretation of the Findings:** Data from these assessments demonstrate that candidates are able to appropriately integrate technology into effective educational experiences for K-12 students as well as support peer teachers in this endeavor. In addition, these assessments indicate that candidates are gaining the skills and dispositions needed to assume leadership roles in their schools, model digital citizenship, and become change agents and advocates for constructive technology usage. One area of weakness indicated by the data is in candidates' knowledge and understanding on the use of technology to support diverse learner needs and backgrounds and to plan for the management of technology resources and students' usage.



Program Changes Based on the Findings: Based on our analysis of the data each year, we have been (and plan to continue) revising the program to

- design assignments and learning experiences which require candidates to assume leadership roles in all LT courses - for example, the addition of the virtual field experience which puts candidates in the role of a mentor for peer teachers.
- strengthen instruction and assignment requirements for support of diverse needs and backgrounds of students in all LT courses
- strengthen instruction and assignment requirements for management and upkeep of technology and media resources as well as management of student access and usage of these resources in all LT courses

### (3) Student learning

Impact of the Learning Technologies candidates on student achievement is assessed through the M.Ed. Educational Research Thesis completed in ELCL-629 and ELCL-630 (Assessment 5). Candidates design and carryout an educational research project exploring the effect of one or more educational technology approaches or applications on K-12 learning, using qualitative, quantitative and mixed-methods approaches. The five-chapter thesis includes background literature, problem statement, methodology, data results, discussion, full bibliography, and appendices showing examples of assessment and instructional tools used.

Principal Findings and Interpretation of the Findings: Data from this assessment indicates that candidates are able to collect and analyze data on student learning in connection with the use of information and communication technologies in an educational context. One area of weakness indicated by the data is candidates' understanding and ability to identify how their own research study fits into the larger realm of educational technology research (and educational research in general).

Program Changes Based on the Findings: As a result of our analysis of the data each year, we have been (and plan to continue) revising the program to

- strengthen instruction and requirements in educational research processes and throughout the program.
- look for ways to help candidates connect their research project to the larger field - for example, we encourage (and fund) candidates who are interest in presenting their research at regional conferences such as the Northeastern Educational Research Association (a regional division of the AERA) and we will continue to push this as well as support candidates who want to publish their findings.

The WPU M.Ed. in Curriculum and Learning, Learning Technologies program has used and will continue to utilize assessment results to improve candidate performance as well as enhance program quality as demonstrated above. Faculty members in the program are committed to using a variety of meaningful and valid assessments to meet ISTE Technology Facilitator standards.