

Technology Plan  
University of Delaware's Medical Laboratory Sciences --  
The Use of Qualtrics  
Paula Melancon  
EDUC 611  
Fall 2016

## **Table of Contents**

- **Abstract**
- **Goals**
- **The Problem**
- **Examples of Evaluations**
  - **Senior Clinical Practicum Site Evaluation**
  - **2016 Senior Program Evaluation**
- **National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) – Standards**
- **Literature Review—What Are the Benefits of Using Qualtrics in Medical Laboratory Science**
- **Technology Plan: Qualtrics for the Department of Medical Laboratory Sciences (MLS) -- Why Qualtrics?**
- **Implementation of Qualtrics in the Department of Medical Laboratory Sciences -- Timeline**
- **Summary**
- **References**

The following technology plan was created in November, 2016, for providing guidance to the Department of Medical Laboratory Sciences for implementing survey software, Qualtrics. In addition to being an important performance toward my degree, this project allowed me to investigate different experiences of other departments, interview others regarding the project, and apply project management tools to a large-scale project.

## **Abstract**

As a student in the Educational Technology Master's Degree program, a Technology Plan is required. This Technology Plan will focus on the current use of paper evaluations in the Department of Medical Laboratory Sciences (MLS) at the University of Delaware and the need for thorough documentation of the evaluations for accreditation with the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). It will review NAACLS Mission statement, Standard I Sponsorship Requirements and Standard VIII Curriculum Requirements. It will stress the benefits of using a web-based survey software verses paper evaluations. It will examine the benefits of using a web-based survey software for both the MLS students and the clinical instructors at the affiliate hospitals. A web-based survey software will ease the process of collecting and organizing data for the MLS program accreditation through NAACLS. It will look at the current use of mailing or hand delivering paper surveys and the value of going paperless. Finally, it will discuss the fact that the University of Delaware, faculty and students are entitled to a free a web-based survey software account called Qualtrics. This section will also include the process needed to make this happen. This Technology Plan's goal is to implement Qualtrics Survey Software in the Department of Medical Laboratory Sciences.

## **Goals**

- To implement Qualtrics at the University of Delaware's Department of Medical Laboratory Sciences.
  - To develop surveys (evaluations) for MLS students on clinical rotations.
  - To develop surveys (evaluations) for clinical instructors at our affiliate hospitals.
  - To reduce the amount of paper that we are currently using on surveys.
- To create extensive question type options, custom survey links, upload images to questions, and analyze robust analytics.
- To create evaluation systems that relate to course content and support the MLS program competencies
- To streamline the information needed for NAACLS accreditation.

## The Problem

The University of Delaware's Department of Medical Laboratory Sciences follows the standards set forth by National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) and goes through a rigorous process for NAACLS accreditation. The process begins with a self-evaluation and there is a huge amount of documentation that must be provided to prove that we are meeting the standards. Part of this documentation occurs while the MLS student is on clinical rotation. We average 32 students per year and each student attends four different 4-week clinical rotations at 26 affiliate hospitals in Maryland, New Jersey, Pennsylvania, and Delaware. Each of the four clinical rotations, focuses on one discipline: Microbiology, Chemistry, Hematology, and Immunohematology (blood banking).

As of June, 2016 all the documentation of surveys (evaluations), for both MLS students and affiliate instructors, was being done by paper and was either mailed or delivered by hand. This involves a large amount of documentation. Each student completes 2 evaluations after each 4-week rotation and each student attends 4 clinical rotations. This totals 256 evaluations per senior class. The first evaluation is called "2016 Senior Practicum Site Evaluation" and is 3 pages long and the second evaluation is called "2016 Senior Program Evaluation" and is 4 pages long. Once the evaluations are collected, the data needs to be organized by discipline: Microbiology, Chemistry, Hematology, and Immunohematology. If a student ranked an evaluation question with a low score, then that area would need to be evaluated for possible improvement. If an improvement is initiated, then the following year is reviewed to see if the change was successful. Statistical analysis needs to be performed on the information collected and the evaluations must be saved for 10 years for NAACLS. The collecting process and organizing the information is very time consuming.

This does not include the documentation and assessment of the students on each rotation by the clinical instructor. The student is evaluated twice during their 4-week rotation, once at 2 weeks and the second time at the end of the 4 weeks. The assessments are documented by the clinical instructor on the performance and progress of the student. The student is graded on professional appearance, punctuality, team player, as well as, academic knowledge and laboratory performance. The student then reviews the 2-week assessment with the instructor and has the opportunity to improve on the areas that are deficient.

**Examples of Evaluations: *Senior Clinical Practicum Site Evaluation & 2016 Senior Program Evaluation***

2016

NAME: \_\_\_\_\_

Name of Clinical Education Site: \_\_\_\_\_

University of Delaware  
 Department of Medical Laboratory Sciences  
 Senior Clinical Practicum Site Evaluation

<p><b>Clinical Practicum Period:</b></p> <p><input type="checkbox"/> One</p> <p><input type="checkbox"/> Two</p> <p><input type="checkbox"/> Three</p> <p><input type="checkbox"/> Four</p>
<p><b>Discipline:</b></p> <p><input type="checkbox"/> Blood Bank</p> <p><input type="checkbox"/> Chemistry</p> <p><input type="checkbox"/> Hematology</p> <p><input type="checkbox"/> Microbiology</p> <p><input type="checkbox"/> Urinalysis</p>

<b>I. Orientation</b>			
A.	After your arrival at the department, were you given the following information?	Yes	No
	1. Written objectives		
	2. Evaluation and grading process of students		
	3. Clinical practicum schedule		
	4. Department structure, organization and policies		
	5. Protocol for reporting results and contribution to laboratory services		
	6. Names of staff in the department so that you were made to feel part of the laboratory		
B.	After the orientation, did you have a clear understanding as to what was expected of you?		
C.	Please give comments or suggestions in regard to the orientation, e.g. amount of information.	Adequate	Inadequate

<b>II. Clinical Learning Experience</b>				
<b>A.</b>	<b>Clinical Instruction</b>	Yes	Some-what	No
	1. Were the learning experiences well planned and structured?			
	2. Did the learning experiences reflect the goals of the course objectives?			
	3. Was there flexibility in your rotation to provide for the level of competency you demonstrated?			
	4. Was adequate time provided to fulfill the course objectives?			
	5. In view of your background education and experiences, was the amount of responsibility given to you during the majority of your clinical experience appropriate?			
	6. Was extra time, if available, utilized appropriately for learning activities (projects, journal articles, study questions)?			
	7. At the completion of the clinical rotation were you adequately confident in your laboratory performance without any supervision?			
<b>B.</b>	<b>Supervision</b>			
	8. Did you have a clear understanding as to whom you were directly responsible?			
	9. Did you have adequate opportunities to communicate with your instructor(s)?			
	10. Based on your experience and skill, was the degree of supervision appropriate?			
<b>C.</b>	<b>Laboratory Interactions</b>			
	11. Did you have some opportunities to interact with members of the staff in sharing professional concerns?			
	12. Were you given opportunities to <b>attend</b> in-service education (seminars, conferences, medical rounds, case presentations)?			
	13. Were you given opportunities to <b>participate</b> in any in-service education programs?			
<b>D.</b>	<b>Evaluation Process</b>			
	14. Were you satisfied with the frequency in receiving your clinical evaluations?			
	15. Were you given an opportunity to comment on your final evaluation?			
	16. Check the statement that best describes your feelings in reference to the clinical evaluation. <p>a. The criteria used for evaluation reflected heavily on:</p> <p>___ cognitive domain (theory, knowledge)</p> <p>___ psychomotor domain (laboratory procedure performance)</p> <p>___ personality trait</p> <p>___ well balanced of all three above</p> <p>b. The final evaluation of my performance was:</p> <p>___ discussed with me prior to completion in writing</p> <p>___ discussed with me after completion in writing</p> <p>___ not discussed</p>			

<b>III.</b>	<b>Summary</b>
A.	Please rate this clinical education experience. <input type="checkbox"/> A very positive experience, wish they all were like this. <input type="checkbox"/> Time well spent. <input type="checkbox"/> Could have been better. <input type="checkbox"/> A very negative experience, would not recommend to other students.
B.	Other comments and recommendations:

<b>IV.</b>	<b>Academic Preparation</b>
A.	State the strengths and weaknesses of your academic preparation for this clinical experience.
B.	Suggestion: Topic(s) that should be considered in future academic preparation.

**University of Delaware  
Medical Laboratory Science Program  
2016 Senior Program Evaluation**

Indicate how strongly you agree or disagree with the following statements. If you choose 4 or 5, see below.

		Strongly Agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly Disagree (5)
1	The University of Delaware Medical Laboratory Science Program met my educational expectations.					
2	The Medical Laboratory Science campus curriculum met my needs as a student of medical laboratory science.					
3	The Medical Laboratory Science clinical practicums met my needs as a student of medical laboratory science.					
4	I found the amount of time scheduled for each clinical practicum to be sufficient.					
5	No additional courses or experiences need to be added to the program.					
6	I would recommend the University of Delaware Medical Laboratory Science Program to others.					
7	In my campus Medical Laboratory Science courses I acquired the knowledge and skills that allowed me to be successful in my clinical practicum experiences.					
8	I received sufficient instruction from university faculty and professional staff through formal classes and laboratories.					
9	The Medical Laboratory Science faculty and professional staff provided me with adequate academic advisement.					
10	I feel prepared to accept employment as a medical laboratory science professional.					
11	I anticipate that I will seek employment as a medical laboratory science professional.					
12	At some future point, I would like to attend graduate school.					
13	I feel prepared to successfully complete the national Board of Certification examination.					



If you selected **(4)** or **(5)** for any item on the previous page, please explain why. You may also use this space for any additional comments that you would like to make regarding your Medical Laboratory Science education.

**University of Delaware  
Medical Laboratory Science Program  
2016 Senior Program Evaluation**

For the list of abilities and skills below, please indicate how important each is to you (Column A) and the extent to which each ability/skill was enhanced by your studies in the UD Medical Laboratory Science program (Column B) If you choose 4 or 5, see below.

		Column A General Importance to You					Column B Studies Enhanced Your Ability				
		<u>Essential</u>	Moderately <u>Important</u>	Not <u>Important</u>			<u>Exceptional Ability</u>	<u>Moderate Ability</u>	<u>Did Not Achieve</u>		
1	Demonstrate proper procedures for the collection, safe handling and analysis of biological specimens.	1	2	3	4	5	1	2	3	4	5
2	Utilize scientific principles (e.g., physiology, immunology, biochemistry, genetics, microbiology, etc.), laboratory principles, and methodologies for the clinical setting.	1	2	3	4	5	1	2	3	4	5
3	Perform laboratory testing with accuracy.	1	2	3	4	5	1	2	3	4	5
4	Evaluate problems that impact on laboratory services and take corrective action.	1	2	3	4	5	1	2	3	4	5
5	Operate laboratory equipment properly and troubleshoot problems effectively.	1	2	3	4	5	1	2	3	4	5
6	Perform equipment preventive maintenance and corrective maintenance.	1	2	3	4	5	1	2	3	4	5
7	Utilize proper techniques in the performance of all laboratory testing.	1	2	3	4	5	1	2	3	4	5
8	<b>Accurately</b> interpret clinical significance, clinical procedures, and laboratory test data.	1	2	3	4	5	1	2	3	4	5
9	Evaluate laboratory data using statistical analysis.	1	2	3	4	5	1	2	3	4	5
10	Apply principles of continuous assessment to all laboratory services.	1	2	3	4	5	1	2	3	4	5
11	Utilize principles of quality assurance and quality improvement for all phases of laboratory services, i.e., pre-analytical, analytical, and post-analytical.	1	2	3	4	5	1	2	3	4	5
12	Comply with laboratory safety regulations.	1	2	3	4	5	1	2	3	4	5
13	Communicate effectively and professionally through oral and written skills to enable consultative and educational interactions in the clinical setting as a member of the healthcare team.	1	2	3	4	5	1	2	3	4	5
14	Evaluate the efficacy of new procedures and instrumentation for a given setting.	1	2	3	4	5	1	2	3	4	5
15	Demonstrate ethical behavior and professionalism and maintain confidentiality of patient results.	1	2	3	4	5	1	2	3	4	5

**University of Delaware  
Medical Laboratory Science Program  
2016 Senior Program Evaluation**

For the list of abilities and skills below, please indicate how important each is to you (Column A) and the extent to which each ability/skill was enhanced by your studies in the UD Medical Laboratory Science program (Column B). If you choose 4 or 5, see below.

		Column A General Importance to You					Column B Studies Enhanced Your Ability				
		<u>Essential</u>	<u>Moderately Important</u>		<u>Not Important</u>		<u>Exceptional Ability</u>	<u>Moderate Ability</u>		<u>Did Not Achieve</u>	
16	Interact professionally with other healthcare personnel and patients.	1	2	3	4	5	1	2	3	4	5
17	Provide leadership in educating others while participating in continuing education for one's own professional development.	1	2	3	4	5	1	2	3	4	5
18	Apply principles of management or supervision.	1	2	3	4	5	1	2	3	4	5
19	Apply principles of educational methodology to educate others.	1	2	3	4	5	1	2	3	4	5
20	Evaluate published scientific studies utilizing knowledge of research design.	1	2	3	4	5	1	2	3	4	5

If you selected **(4)** or **(5)** for any item on the previous page, please explain why. You may also use this space for any additional comments that you would like to make regarding your Medical Laboratory Science education.

***Thank you for your participation in this evaluation***

# **National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) – Standards**

The University of Delaware's Department of Medical Laboratory Sciences follows the standards set forth by National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). NAACLS is the foremost international agency for accreditation and approval of educational programs in the clinical laboratory sciences. These standards are considered the benchmarks to guide Medical Laboratory Sciences (MLS) programs by setting the highest standards for quality educational programs in clinical laboratory sciences and related health professions. The Standard I Sponsorship Requirements includes the responsibilities of the sponsors. There are 4 main responsibilities of the sponsor: all Standards must be met, all student activities are educational, all communication between the sponsor and its affiliates must be documented, the sponsor must have a formal affiliation agreement with the affiliate. The Standard VIII Curriculum Requirements has 3 components, each component outlines the requirements for an MLS program to be accredited. The three components are: Instructional Areas, Learning Experiences, and Evaluations. The NAACLS mission statement and standards are included below.

## **NAACLS MISSION STATEMENT**

- ❖ The NAACLS is committed to being the premier international agency for accreditation and approval of educational programs in the clinical laboratory sciences and related health professions. NAACLS provides leadership in fostering innovative educational approaches and actively supports cooperative efforts with other agencies.
- ❖ NAACLS, in collaboration with its professional organizations, provides comprehensive services including program accreditation, program approval, consultation, and continuing education. NAACLS provides these services for educational programs, students, employers and healthcare consumers.
- ❖ NAACLS is dedicated to volunteer peer review as the foundation of accreditation and approval. The agency strives to prepare these volunteers and to assist them in providing exemplary program analysis, based upon principles of honesty, fairness, objectivity and integrity.
- ❖ NAACLS demonstrates commitment to public service by setting standards for quality educational programs in clinical laboratory sciences and related health professions. NAACLS will continue to be responsive to the needs of the healthcare community.

# STANDARDS FOR ACCREDITED AND APPROVED PROGRAMS

## Core Standards

### I. Sponsorship

#### A. Sponsoring Institution

The sponsor of an educational program must be one of the following:

1. A post-secondary academic institution accredited by an institutional accrediting agency that is recognized by the U.S. Department of Education and given the authority to provide post-secondary education, which awards a minimum of a certificate at the completion of the program.
2. A hospital, medical center, or laboratory accredited by an applicable recognized agency which awards a minimum of a certificate at the completion of the program.

#### B. Responsibilities of the Sponsor

1. The sponsor has primary responsibility for:
  - a. supporting curriculum planning and course selection by program faculty and staff
  - b. appointing faculty and staff
  - c. maintaining student transcripts permanently
  - d. granting the degree and/or certificate documenting satisfactory completion of the educational program
  - e. ensuring that appropriate personal safety measures are addressed for students and faculty
  - f. ensuring that all provisions of the Standards are met
  - g. ensuring that graduates of the program have obtained or will obtain the minimum degree and/or certificate upon completion of the program
2. The sponsor must ensure that the activities assigned to students in the clinical setting are educational
3. There must be documented ongoing communication between the sponsor and its affiliates for exchange of information and coordination of the program.
4. The sponsor must have a formal affiliation agreement with all other entities that are involved in the education of the students, which describes:

- a. the relationship
- b. the roles
- c. the responsibilities of the sponsor and that entity
- d. the assurance for completion of students assigned clinical requirements in the event that an affiliation is discontinued

## **VIII. MLS Curriculum Requirements**

### **A. Instructional Areas**

1. Prerequisite courses in biological sciences, chemistry and mathematics
2. The curriculum must address pre-analytical, analytical and post-analytical components of laboratory services. The curriculum must have an emphasis of: principles and methodologies, performance of assays, problem-solving, troubleshooting techniques, interpretation and evaluation of clinical procedures and results, statistical approaches to data evaluation, principles and practices of quality assurance/quality improvement, and continuous assessment of laboratory services for all major areas practiced in the contemporary clinical laboratory. The curriculum must include the following:
  - Clinical chemistry
  - Hematology/Hemostasis
  - Immunology
  - Immunochemistry/transfusion medicine
  - Microbiology
  - Urine and body fluid analysis
  - Laboratory Operations
3. Application of safety and governmental regulations and standards as applied to clinical laboratory science.
4. Principles and practices of professional conduct and the significance of continuing professional development.
5. Communications sufficient to serve the needs of patients, the public and members of

the health care team.

6. Principles and practices of administration and supervision as applied to clinical laboratory science.
7. Educational methodologies and terminology sufficient to train/educate users and providers of laboratory services.
8. Principles and practices of clinical study design, implementation and dissemination of results.

## **B. Learning Experiences**

1. Learning experiences (courses, practica, other required activities) must be properly sequenced and include necessary content and activities to enable students to achieve entry level competencies in each major discipline as listed in Standard VIII.A.2.
2. After demonstrating competency, students, with qualified supervision, may be permitted to perform procedures.

## **C. Evaluations**

Evaluation systems must relate to course content and support program competencies. If there is evidence that competencies are not adequately achieved then course objectives will be examined in detail to assure that the objectives are behavioral, include all domains and relate directly to the evaluations used.

1. These evaluation systems must be employed frequently enough to provide students and faculty with timely indications of the students' academic standing and progress.
2. The evaluation systems must serve as a reliable indicator of the effectiveness of instruction and course design.

(National Accrediting Agency for Clinical Laboratory Sciences, 2012)

Adopted 2012, Revised 9/2013, 1/2014, 4/2014, 10/2014, 11/2014, 10/2015, 4/2016, 6/2016

# Literature Review—What Are the Benefits of Using Qualtrics in Medical Laboratory Science

Qualtrics can aid in developing and creating a personalized learning environment for the MLS student. As stated in, *How People Learn*, an effective learning environment is learner centered, knowledge centered, assessment centered, and community centered (National Research Council, 2000). The MLS student clinical rotations are an effective learning environment because they incorporate all 4 areas: learner centered, knowledge centered, assessment centered, and community centered. Qualtrics can be utilized as an evaluation system to document all communications of the student and the clinical instructor to help achieve an effective learning environment. As stated in, NAACLS Standards, these evaluation systems must be employed frequently enough to provide students and faculty with timely indications of the students' academic standing and progress (National Accrediting Agency for Clinical Laboratory Sciences, 2012). Evaluations and surveys ensure the needs of the students are being met while off campus and gives academic support to the clinical instructors at the affiliate sites. Also, Qualtrics can be utilized to document assessment centered learning.

Learning theory suggests that individuals learn in many ways, including, building on existing prior knowledge, and organizing factual knowledge in "clusters". The individual learns to adopt a "metacognitive approach" to thinking which includes: setting learning goals, monitoring progress towards achieving goals, and transferring learning to both retrieve and apply knowledge (National Research Council, 2000). All educators need to build on the students' existing knowledge, teach subject matter in depth to build factual knowledge, and teach metacognitive skills that enable students to work toward learning goals and transfer knowledge (National Research Council, 2000). This process occurs while the MLS student is on their clinical rotations.

The term "**learner centered**" refers to environments that pay careful attention to the knowledge, skills, attitudes, and beliefs that learners bring to the educational setting. This term includes teaching practices that have been called "culturally responsive," and "culturally compatible" (Ladson-Billings, 1995). In a learner centered environment, teaching can be conceived as constructing a bridge between the student and the subject matter. This bridge can help in getting a sense of what the student knows and is cable of doing (National Research Council, 2000). Qualtrics would be beneficial for this bridge.

**Knowledge-centered** learning environment support the need to help students become knowledgeable by taking current knowledge and learning, transferring and developing it. The educator teaches how to organize the knowledge and why it is taught. The educator can teach things in isolated parts, if, they are eventually connected to a bigger picture. Then the student can truly understand the concept. Knowledge-centered learning environments also focus on the type of information and activities to help students develop an understanding of subjects (e.g., Prawat et al.,1992). In summary, knowledge centered learning emphasizes the new information on sense-making and asking questions when it does not (National Research Council, 2000).



In an **assessment-centered** learning environment, teachers use ongoing assessments to provide opportunities for feedback and revision and what is assessed is congruent with the student's learning (National Research Council, 2000). As stated in *Philosophy of Education – Aims, Theory, Common Sense, and Research*, a student can be educated through training – that is, training administered in a specific way. The student acquires analytical reflection on what they are doing, while considering their position within a wider context (Pring, R., 2004). In a system of personalized learning, educators can create and implement assessments that measure competencies based on the curriculum standards, analyze assessment data, and provide differentiated instruction to those students who are below standard on the students' own time schedule (Rodel Foundation, 2014). During their student laboratories and clinical rotations, the MLS students are given continual assessment to monitor their progress during their rotations. Qualtrics can be utilized for the assessment and aid the communication between the students, the clinical instructors and the MLS faculty. The success of the students' education is dependent on good open communication especially when the student is off campus.

The term **community-centered** learning environment, includes the community as defined by the classroom, the school as a community, homes, and towns, state, national, and even global. The degree that the students, teachers, and administrators feel connected to the community influences learning. The MLS student will be additionally connected to the medical community, as they go on their clinical rotation. Connections to experts outside of the school can have a positive influence on the student, and the experts provide opportunities for the student to interact with others outside of school. It helps to raise the standards of the school, and the student knows that they will be sharing their work and knowledge with others (National Research Council, 2000). This is true of the MLS student who has many opportunities to meet with medical experts in school and outside of school.

## **Technology Plan: Qualtrics for the Department of Medical Laboratory Sciences (MLS) -- Why Qualtrics?**

As stated earlier, the Department of Medical Laboratory Sciences at the University of Delaware goes through a rigorous process for National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) accreditation. The process includes a huge amount of documentation that must be provided to prove that standards are being met. Part of this documentation occurs while the MLS student is on clinical rotation for both winter session and spring semester. Qualtrics will ease the process of completing the surveys. Another department in the College of Health Sciences (Physical Therapy), had the same issue with surveys and corrected the issue with Qualtrics.

The University of Delaware, faculty and students have free access to a Qualtrics Survey Software account. The MLS department can utilize Qualtrics at no cost. The Qualtrics Survey Software enables the user to create

customized surveys that are paperless. The surveys can be utilized while the MLS student is off-campus on their clinical rotations. During clinical rotations, the clinical instructor needs to be in communication with the MLS department. Improving the MLS students' outcomes is enhanced by delivering real-time insights to each student's clinical laboratory experience. Training surveys and development evaluations help schools and programs measure the effectiveness of their training and development programs and determine what changes can be made to improve them.

The Medical Laboratory Sciences program at the University of Delaware is an accredited program by NAACLS. The MLS program must meet rigorous standards, provide documentation and a thorough inspection. The accreditation process begins with the program's own self-evaluation. The NAACLS forms that the reviewers will use are available on the NAACLS web site ([www.naacls.org](http://www.naacls.org)). During this time, the program should review the NAACLS Standards, other documents, such as the programmatic and institutional mission statements, supply additional information for the functions of the program. The result of this self-evaluation is the Self-Study, which is a document that demonstrates the program compliance with the Standards. Qualtrics would be a huge benefit to this evaluation process by consolidating large amounts of data and statistics. The other important aspect of Qualtrics is that it is free and will be no cost to the MLS department.

## **Implementation of Qualtrics in the Department of Medical Laboratory Sciences -- Timeline**

### **Friday, July 15, 2016, Dept. of MLS - Reflection and Planning Meeting**

It was discussed, a need to discontinue the many paper evaluations done by the department. The department was interested in an electronic assessments tools that had survey software. This survey software could help with the evaluations performed by the MLS students and the clinical instructors. It would aid in the preparation for NAACLS.

It was also discussed that the Department of Physical Therapy had the same problem and was now using Qualtrics to manage student evaluations.

### **Thursday, September 22, 2016, Dept. of MLS - Staff Meeting**

The department chair introduced a representative from the Center for Teaching & Assessment of Learning. The representative spoke and gave a synopsis of the electronic assessments tools he has and what services his department offers, specifically **Qualtrics**. Qualtrics is a UD-licensed software and is a powerful survey tool. It's free and you can log in with your UD password. You can formulate the surveys as you want and then later print an evaluation of the information that was retrieved. It will not, however, automatically update the class roster. It doesn't talk with other UD systems. The representative said he would be happy to meet with the department as a group when hashing out what we would like to accomplish. His office is in Pearson Hall.

### **Monday, October 17, 2016, Ad Hoc – Qualtrics Student Evaluation Instrument Committee**

The Ad Hoc – Qualtrics Student Evaluation Instrument Committee met with a representative from the Center for Teaching & Assessment of Learning, and a representative from Physical Therapy (PT) for a demonstration of Qualtrics. The representative from PT reviewed their departments use of Qualtrics and shared their student evaluations. The Ad Hoc committee decided to incorporate Qualtrics into the department. The chair of the committee has since developed both the *Senior Clinical Practicum Site Evaluation* and the *Senior Program Evaluation* into the Qualtrics Survey Software.

## **Tuesday, January 3, 2017, MLS Student Clinical Rotations**

Qualtrics will be implemented with the new year, 2017. The students begin their rotation in January and will finish in May, 2017. During this time, all student evaluations will be in Qualtrics. The students can add a mobile app to their cell phones and can complete the evaluations with their cell phones. The Ad Hoc committee will continue to monitor the progress of Qualtrics.

### **Ad Hoc – Qualtrics Student Evaluation Instrument Committee**

<b>Committee Chair, Instructor</b>	9/1/17-8/31/18
Clinical Education Coordinator - Instructor	9/1/17-8/31/18
Professor	9/1/17-8/31/18

## **In Summary:**

- At the University of Delaware, faculty and students are entitled to a Qualtrics Survey Software account.
- Qualtrics Survey Software enables the user to create customized surveys that are paperless.
- The surveys will be utilized while the MLS student is off-campus on their clinical rotations. During rotation, the clinical instructor needs to be in communication with the MLS department.
- Improving students' outcomes depends upon delivering real-time insights to each students' clinical experience.
- Training surveys and development evaluations help schools measure the effectiveness of their training and development programs and determine what changes can be made to improve them.
- Documentation and execution of the many surveys can be accomplished by Qualtrics.

## **References**

Delaware Humanities Forum. (2015) *Mission*. Retrieved from <http://www.dehumanities.org/about-dhf/mission/>

Ladson-Billings, G. (1995) Towards a theory of culturally relevant pedagogy. *American Educational Research Journal* 32:465-491.

National Accrediting Agency for Clinical Laboratory Sciences. (2012) Retrieved from <http://www.naacls.org/>

National Research Council. (2000). *How people learn: Brain, mind, experience, and school*. Washington, DC: National Academy Press.

Prawat, R.S., J. Remillard, R.T. Putnam, and R.M. Heaton. (1992) Teaching mathematics for understanding: Case study of four fifth-grade teachers. *Elementary School Journal* 93:145-152.

Pring, R. (2004) *Philosophy of Education: Aims, Theory, Common Sense, and Research*. London: Continuum.

Qualtrics Retrieved by <https://udel.onecampus.com/task/all/qualtrics>

Qualtrics Survey Tool. (2016) Retrieved from <https://www.unthsc.edu/academic-affairs/qualtrics-survey-tool/>

Rodel Foundation. (2014) *Personalized Learning 101* Retrieved from <http://www.rodelfoundationde.org>