



SoTL Grant Application Form

(2017-2018)

To be considered for funding, your research proposal must align with the following definition of the Scholarship of Teaching and Learning, SoTL, endorsed by the University Faculty Council in January of 2014:

"The rigorous investigation of student learning, with the purpose of developing novel teaching methodologies and practices that can lead to the measurable enhancement of student learning. The results of the investigation are made public through quality scholarly outlets and widely-accepted conferences and general or discipline-specific journals."

Proposals are due to the Office for Teaching, Learning, and Assessment by **Friday, September 15th, 2017** and should be [submitted online](#). Award recipients will be notified by **Friday, October 6th, 2017**. Selected recipients will need to submit a final report for the grant project to TLA by **September 1st, 2018**.

I. Basic Information

Title of Project: Impact of video-recorded practice of advanced physical assessment skills with peer feedback in distance education among RN to MS students

Investigator(s) Information

Principal Investigator:

Name: Kashica J. Webber-Ritchey
 College: College of Science and Health
 Department: School of Nursing
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Other Investigators (Co-Pi):

Name	College	Department
Donna Badowski	College of Science and Health	School of Nursing
Elisabeth Ramos-Torrescano	College of Science and Health	Faculty Instruction Technology Services (FITS)

For each investigator, please include an abbreviated CV using the SoTL grant CV template.

Will your project involve human subjects? Yes No

If Yes, you must include evidence of IRB approval or exemption, or of having applied for IRB approval or exemption. Please note that before any granted funding can be made available, you will be required to provide evidence of IRB approval or exemption.

Requested Funds

Amount Requested (up to \$2,500): \$2,500

II. Project Abstract (250 words or less)

Advanced health assessment is required content for graduate level education in nursing programs. This course includes both acquisition of knowledge and skills of advanced health assessment. Traditionally, advanced health assessment skills are demonstrated and practiced by students in a skills lab with face-to-face interaction with the other students and the instructor. With the newly implemented fully online RN to MS program in winter 2015, faculty teaching in the RN to MS program needed to develop an innovative teaching strategy for students to accomplish advanced physical assessment skill development and recreate the lab experience in an online environment. This research project examines the efficacy of advancing students' physical assessment skills by requiring students to submit weekly video-recorded practice of their physical assessment skills on either a purchased inflatable manikin or significant other using Panopto™, which are then uploaded to a Desire to Learn discussion board shared with a fellow classmate who is their lab partner for the quarter. The lab partners then view each other's weekly video-recorded practice and offer peer feedback based on a checklist provided by the instructor. This descriptive study design will use both qualitative and quantitative measures which will allow us to evaluate the student's experience and their perception of whether these two strategies were effective in advancing their mastery of advanced physical assessment skills. The results of this research project will be critical in informing the development of teaching strategies used within an online environment as it relates to advancing physical assessment skills.

III. Project Description (1000 words or less)**Purpose of Project**

Nursing 460 is a fully online course that focuses on advancing physical assessment skills. NSG 460 in the RN to MS program was developed to address barriers in providing a required course lab experience in a fully online environment. Through DePaul Online Teaching Series (DOTS), a major redesign was completed to provide an online lab experience similar to the lab experience in a face-to-face course requiring two vital components for the online lab to simulate the face-to-face lab experience. First, students needed demonstrate practice of weekly physical assessment skills and second, they needed to receive feedback on their skill performance. The purpose of this project is to evaluate the impact of students creating weekly video-recorded practice of physical assessments on either an inflatable manikin or significant other using Panopto™, which are uploaded to a Desire to Learn (D2L) discussion board along with providing/receiving peer review feedback from an assigned lab partner based on a checklist provided by the instructor.

Research Questions

- 1) Did weekly video-recorded practice of physical assessment skills advance the RN to MS student's existing physical assessment skills?
- 2) Did students find the peer review of their weekly practice videos to be useful in advancing their physical assessment skills?

- 3) Did students feel the innovative strategy of student video-recorded practice of physical assessment skills with peer review as a valuable learning strategy?

Theoretical Framework

Explain how your proposed research builds on or fits into existing relevant literature. Provide a brief but comprehensive bibliography as an appendix.

Du, Liu, Liu, Yin, Xu, Zhang, and Wang (2013) found online education has positive effects in improving students' assessment skills while enhancing their confidence in performing assessment skills. Traditionally, physical assessment skills are taught in a skills lab setting with students engaged in simulated practice of those skills on a static manikin or on their lab partner as the patient. Students typically work in pairs with one student performing their physical assessment skills on a "simulated patient" while their lab partner provides feedback. Creating this learning strategy within the online environment can be challenging. Only 12.2% of graduate schools teaching advanced health assessment require students to video record themselves as a teaching strategy but, there was no mention of peer feedback with a lab partner. They recognized a need to integrate web-based strategies in advanced health assessment courses and that this strategy is still underdeveloped and lacking evaluation (Kelley, Kopac, & Rosselli, 2007). Bowden, Rowlands, Buckwell, and Abbott (2012) used CPR simulation sessions with online video recordings and online feedback for nursing and medical students. Students reviewed the recorded videos to refresh their skills and faculty appreciated a comprehensive review of the simulation to provide thorough feedback. This strategy allowed students' extended time for reflection on action resulting in an enhanced learning experience. The peer feedback aspect incorporates communication among peers and interaction within an active and collaborative learning environment. Studies show communication, interaction amongst students, and creation of an active collaborative learning environment lead to successful online courses (Sowan & Jenkins 2013; Simonson, Schlosser, & Orellana, 2011).

Dr. Don Kirkpatrick developed a four-level evaluation model on the effectiveness of training measuring the degree of students' engagement in learning an activity [level 1], acquisition of the intended knowledge, skills, attitude, confidence, and commitment [level 2]; application of what has been learned in student's current practice [level 3], and occurrence of targeted outcomes [level 4] (Kirkpatrick Partners, 2017). This study focuses on Kirkpatrick Model's level 1 involving student engagement by exploring the promotion of student engagement so that they can move to the Kirkpatrick Model's level 2. In absence of student engagement in learning an activity, they will lack the motivation to learn which inhibits movement to level 2. Our study will investigate student engagement through student perspectives on the effectiveness of an innovative strategy that simulates the face-to-face lab experience in an online advanced physical assessment course. Study results will enable research contribution and better understanding of the connections between student engagement, teaching strategies, the advancement of physical assessment skills, and distance education.

Research Methodology

Describe the research design you have chosen to answer your research question, and briefly explain why it is appropriate for this project. Make sure to indicate the kind of data that will be collected, how it will be collected, and how it will be analyzed.

The study will use a descriptive design by collecting data through quantitative and qualitative measures from 25 RN to MS students that have completed NSG 460 in the RN to MS program at DePaul University. For the quantitative portion of the study, students will complete a survey conducted via Qualtrics® that can be viewed here: http://depaul.qualtrics.com/jfe/form/SV_eEca2ha4pNLn60B. This online survey requires approximately 15-20 minutes to complete. For the qualitative portion of the study, students will complete a 15-minute individual interview via Zoom video-conferencing. The individual interviews will gather data from students on their online learning experience, the two instructional strategies of video-recorded practice assessments and peer feedback, and their overall experience associated with completing NSG 460.

All qualitative data collected from individual interviews will be transcribed and analyzed through the search for qualitative themes. The quantitative data from the online survey will be exported from Qualtrics® into SPSS for analysis. The combination of quantitative and qualitative data will enable us to gather detailed perspectives from students and obtain a deeper insight into the impact of video-recorded physical assessments along with peer review in an online learning environment.

Impact of Project

Assuming successful completion of this project, please describe how the results of the proposed research could help in the development of teaching methodologies or practices aimed at improving student learning in measurable ways.

NSG 460 course has been taught twice since the integration of this innovative strategy. The course passed a Quality Matters review. However, this innovative strategy has not been assessed from the students' perspective. The completion of this project will further the development of teaching strategies in distance education as it relates to advancing physical assessment skills in three ways. First, determine the effectiveness of the strategy in meeting students' learning needs as it relates to advanced physical assessment skills and inform instructors at DePaul University in the RN to MS program on its effectiveness in positively impacting student learning. Second, share our results in an academic journal publication focused on teaching in graduate level nursing programs, distance education, or simulation to contribute to the greater academic community and add to the dearth of literature on this topic.

Dissemination of Results

Describe how you plan to share the results of your project, within and/or outside of the DePaul community.

The results will be shared with instructors within the School of Nursing and the greater DePaul University community. We will publish our findings in a peer-reviewed journal targeting nursing education.

IV. Project Plan and Timeline

Describe the proposed project plan and timeline. *Please note all 2017-2018 grant funds need to be used by the end of the fiscal year.

The proposed project plan is as follows:

September 2017:

- Obtain IRB approval,
- Revise Qualtrics® questionnaire if required by IRB,
- Revise recruitment email scripts and update if required by IRB

October 2017:

- Begin first phase of recruitment to target students who have taken NSG 460 prior winter quarter 2018
- Send recruitment email with link to Qualtrics® survey to students meeting inclusion criteria
- Send interview recruitment email to students meeting inclusion criteria

November 2017:

- Close Qualtrics® survey
- Complete qualitative interviews
- Submit abstract to the International Nursing Association for Clinical Simulation and Learning (INACSL) Conference

January 2018:

- Begin data analysis on first phase of recruited students

March 2018:

- Begin second phase of recruitment to target students who have taken and completed NSG 460 during winter quarter 2018
- Send recruitment email with link to Qualtrics® survey to students meeting inclusion criteria
- Send interview recruitment email to students meeting inclusion criteria

April 2018

- Begin data analysis on second phase of recruited students

May 2018:

- Finalize data analysis
- Begin write-up of findings for manuscript

June 2018:

- Attend INACSL Conference

July 2018:

- Submit manuscript for publication

V. Budget

Provide a detailed, itemized budget of how proposed funds will be used. If applicable, provide information about any external funds you have secured for this project and/or matching funds from DePaul University (including in-kind contributions).

Item	Cost	Quantity	Total
Starbuck's eGift Card	\$5.00	50	\$250.00

INACSL Conference Registration Fee	\$550.00	3	\$1650.00
Student Assistant for analysis of quantitative data- 3 weeks @5 hours/week for \$12/hour	\$180.00	1	\$180.00
Airfare to Toronto Canada (fees associated with hotel/airfare will be covered as out-of-pocket expenses)	\$420		\$420.00
Total			\$2500.00