

## 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 15<sup>th</sup>, 2017** and should be [submitted online](#). Award recipients will be notified by **Friday, October 6<sup>th</sup>, 2017**. Selected recipients will need to submit a final report for the grant project to TLA by **September 1<sup>st</sup>, 2018**.

### I. Basic Information

Title of Project:     Nursing Student Taught Health Education Curriculum: Assessing how an 8 week health curriculum taught by nursing students impacts the knowledge, attitudes, and intended behaviors of 6<sup>th</sup> graders at San Miguel School.

**Investigator(s) Information**

**Principal Investigator:**

Name:                 \_\_\_ **Randi Singer, PhD** \_\_\_\_\_  
 College:             \_\_\_ College of Science and Health \_\_\_\_\_  
 Department:        \_\_\_ Nursing \_\_\_\_\_  
 Phone Number:     \_\_\_ 610-955-2240 \_\_\_\_\_  
 Email Address:     \_\_\_ rsinger2@depaul.edu \_\_\_\_\_

**Other Investigators (Co-Pi):**

Name	College	Department

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

Will your project involve human subjects?                 X 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): \_\_\_\$2000\_\_\_\_\_

## **II. Project Abstract (250 words or less)**

- a. San Miguel School is a middle School serving primarily Latino students who are at risk academically and whose families are economically disadvantaged. The design of a health curriculum for 6th graders will be taught by DePaul University Nursing Students. Singer will work with students to create a health education curriculum specific to the needs of sixth graders at San Miguel Back of the Yards. Prior to the start of the 8-10 week health curriculum, a pretest will be given. Assigned nursing students will facilitate each health class during winter, and spring 2018. Then, a post-test survey and evaluation will be utilized to assess the effectiveness of the nursing-student taught health curriculum.

## **III. Project Description (1000 words or less)**

### **IV. Describe your research project.**

#### **Purpose of Project**

The purpose of this project is to create a self sustaining 6<sup>th</sup> grade health program taught by nursing students and test its impact on knowledge, attitudes, and intended behaviors.

In order to identify eight areas of student-indicated health education need, the researcher met with teachers, staff, and the director of student life for the San Miguel School. Additionally, a thorough review of the literature included needs assessments, health education curriculum for inner-city youth, and similar educational interventions by healthcare provider students (Marx et al., 2007; O'hara-Tompkins, Kamal, & Chapman, 2005.; Schalet et al., 2014; Sherwood-Puzzello, Miller, Lohrmann, & Gregory, 2007). The results of this review supported the health education needs expressed by those working with the 6th graders of San Miguel School. The eight health curriculum component areas to be covered over the allotted eight weeks include: hygiene, safety and immigration, alcohol and drug use, interpersonal relationships, online interactions, sexual health, nutrition and exercise, and mental health (U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion, 2010).

The health education curriculum will be developed around these eight identified need areas and will incorporate evidence-based research in both format and content in order to keep students engaged and deliver relevant material (2017 Middle School Youth Risk Behavior Survey, 2017). The curriculum will utilize movie clips and case studies in order to personalize the material as well as role plays to allow students to practice the skills necessary for healthy decision-making (Prochaska, DiClemente, & Norcross, 1992; Prochaska et al., 1992; Society of Health and Physical Educators [SHAPE] America, 2015; Sears, 1992; Wooley, 2013). The curriculum will also be tailored to to the self-identified needs reported by students during the pretest. This way, the information received by the students is directly applicable to the decisions students report facing on a daily basis (Chambers & Ma, 2016; Goldsmith, Tran, & Tran, 2014; Kosciw, Greytak, & Diaz, 2009; O'hara-Tompkins et al., 2005; Schalet et al., 2014a;

U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion, 2010).

**Please provide a clear statement of the teaching-learning issue that you want to investigate, and explain briefly why this issue warrants a systematic and rigorous investigation.**

Geared toward academically at-risk middle schoolers from socioeconomically marginalized and vulnerable families, San Miguel Back of the Yards educates 90 middle schoolers, eight and a half hours a day, five days a week, year round. The curriculum at San Miguel Back of the Yards focuses on reading and math and requires participation in extracurricular team sports. While the students at San Miguel Back of the Yards are burgeoning adolescents, there has been no formalized health education program. Because nursing students at DePaul are required to engage in Community Based Service Learning, a nursing student in her first quarter of nursing school at DePaul University was assigned to develop and teach lessons about teen health to the middle schoolers. Having no experience as a health educator, this student felt overwhelmed by the mission to successfully teach middle school health to first generation English speakers in one of the most crime ridden neighborhoods in America.

Presently, inner city schools like San Miguel School, around Chicago have DePaul nursing students educating their young people about emotional, physical and sexual health. Although well-intentioned, these student nurses have not been trained to teach this content to middle schoolers. In the past at San Miguel School, there has been no standardized health curriculum for nursing student-led health education (Eric Serrano, Verbal Communication). It is, therefore, the objective of this project to create a long-term educational intervention with appropriate student-nurse training that assures consistency across nursing student and middle school student experience of both content and format (Goldsmith et al., 2014; Schalet et al., 2014a). By so doing, student nurses will be prepared to offer quality standardized evidence-based health education year after year at San Miguel School.

**State, in clear and measurable terms, a *Research Question* to indicate specifically what it is that you want to know as a result of this investigation.**

1. To what degree and in what ways does a nursing student taught health curriculum intervention affect the knowledge, attitudes, and intended behaviors of sixth graders at San Miguel School related to their physical, emotional, and sexual health?
  1. What impact does a curriculum specifically tailored to the needs of the student population have on health knowledge, health attitudes, and intended health-related behaviors for 6<sup>th</sup> grade students at San Miguel School?
  2. Do 6<sup>th</sup> grade students at San Miguel School feel more prepared to deal with their physical and emotional health after receiving this 8 session program?

3. Do students know where to go for help related to drugs, alcohol, physical safety, sexual safety, depression, sexuality, identity, etc.?

### Theoretical Framework

In order to create an effective and well-respected training for seventh grade students at San Miguel Back of the Yards, it must be grounded by theories supporting the education to be worthwhile and evidence based (Chung & Lau, 2014; Hull, Cullen, & Hekelman, 1989; Porter & Krinsky, 2014). Movie clips and the affective components of working through case studies would speak directly to those who do not already buy into the importance of physical, emotional, and sexual health. These are the students who are in what (Prochaska, DiClemente, & Norcross, 1992) call the “pre-contemplation” phase, as they are not aware that they need to examine themselves and modify their behavior and beliefs for their own benefit. As they state, “Resistance to recognizing or modifying a problem is the hallmark of pre-contemplation” (p. 1103). Emotional appeal has been shown to help people in pre-contemplation move to making change (Kiviniemi & Brown-Kramer, 2015). In this sense, an affective approach to this training would be to use video interviews and real-life case studies to depict the life experiences of other seventh graders. Such an approach would be an appropriate way to connect with those currently in pre-contemplation to facilitate making a change toward healthy decision making.

Additionally, this study utilizes the Health Belief Model (HBM) and the Theory of Reasoned Action (TRA) to support the notion that students would feel more confident in their ability to interact with their peers and family after receiving specific education (Klotzbaugh & Spencer, 2014). The HBM was initially utilized to support how people react to public health initiatives such as smoking cessation. The assumption is that consumers change their health behavior based on information. Therefore, middle schoolers may also change their behavior and attitudes after receiving specific information related to their health and wellbeing (Kaufman et al., 2015) Additionally, the TRA Model demonstrates how beliefs, attitudes, intentions, and self-efficacy inform behavior (McNulty et al., 2014). Criticism of models such as the HBM and the TRA are based on the fact that both models assume that people make decisions based on a rational cost-benefit analysis. In the past decade, a compelling body of research from psychology and behavioral economics has found that emotion plays a far greater role in decision-making than is accounted for by the socio-cognitive models (Ariely, 2010). Again, for this reason, using an affective teaching approach would address two needs: 1) It would tap into what is increasingly recognized as an essential component of decision-making (emotion); and 2) It would use an approach that has been found to be effective in moving people in pre-contemplation and

contemplation modes towards behavioral change ((Prochaska et al., 1992). Singer, (2009) characterized the distinctions between the HBM and the TRA by explaining that the HBM answers why individuals have the beliefs they have, while the TRA offers an explanation of how these beliefs inform our behavior. This study suggests that in order to change student behavior, student beliefs must be addressed. Furthermore, this study assumes that beliefs are supported by existing knowledge, or the lack thereof (Tomaino, 2012). Thus, offering needs specific education to students will allow researchers to demonstrate the process by which education informs beliefs and how the change in beliefs can drive intended behavior.

### Research Methodology

Evaluating the effectiveness of the health education intervention on student knowledge, attitude, and intended behaviors is essential to assessing if objectives were met and if curriculum adjustment should be made(Saunders, Evans, & Joshi, 2005). In this study, evaluation will be completed using a quantitative and qualitative pretest and posttest survey. The pretest will be administered before the curriculum implementation and the posttest will be administered afterward and both will include questions assessing student knowledge, attitude, and intended behaviors in the eight health curriculum component areas. The pretest will also include open-ended questions about the eight health curriculum component areas in order to assess student health education needs prior to the educational intervention and lesson modifications will be made based on these indicated needs. Additionally, the posttest will ask students to evaluate if their learning needs were met to assess if further changes to the curriculum are needed. The quantitative information gathered from both surveys will be entered into SPSS for statistical analysis.

#### Instrument:

A survey will be administered before and after the educational program. The instrument will assess students' sense of knowledge and capability related to their physical, emotional and sexual health. Additionally, the survey will measure student attitudes and intended behavior toward healthful decision making. These variables will be on a ratio scale. Most responses on these surveys are quantifiable. The Pre-test will be a likert-type scale survey requiring students to rate their knowledge about health related concepts like nutrition, exercise, puberty, hygiene, depression, alcoholism, safety. Attitudes will be assessed through survey questions about beliefs, judgements and concerns about physical, and emotional health and safety. Intended behaviors will be gauged through survey questions assessing to what extent students plan utilize the recommendations from class into their daily lives. This same examination will be given at the end of the

session. This pretest – posttest design will address whether there has been a significant change in knowledge and attitudes and plan for future behavior.

### Impact of Project

If this program is successful it could be used in other similar urban middle schools located in cities with nursing programs requiring community engagement. This program has the potential to increase the health literacy of students and assist them in implementing that new knowledge to positively alter their health behaviors (Anonymous, 2009; Blake et al., 2001; Fitzpatrick, 2011; Legg & Grigoriev, 2003; SHAPE America, 2015; WHO, 1996; Wiley & Cory, 2013). With the proper interventions put in place to mitigate the psychological, social, and educational risks introduced by the implementation of this program, the potential benefits to students knowledge and health could be hugely beneficial and introduce relatively few negative effects on the students involved. This project will transform a health education initiative that lacks sustainability, oversight, and organization into a repeatable, evidence-based, high-quality program consistently evaluated and improved for effectiveness in addressing the health needs of San Miguel 6th graders. Additionally, this project will contribute to research on both educational initiatives in at-risk populations like San Miguel students as well as adolescent health education initiatives (Anonymous, 2009; Blake et al., 2001; Fetto et al., 2001; Fitzpatrick, 2011; Legg & Grigoriev, 2003; WHO, 1996) .

### Dissemination of Results

I will be working with doctoral level students to analyze the data from this project. As part of their coursework, these students will be asked to present a poster, presentation, or submit a journal article for publication to disseminate the results of this study. I will be working directly with these students to mentor and facilitate this.

## **V. Project Plan and Timeline**

September 18, 2017

- Submit IRB

September 2017 – December 2018

- Work with nursing students and Eric Serrano to create the 6th grade health education curriculum in for Winter 2018.

- Prepare nursing students to teach this subject matter

November 2017

- Pretest

January – February 2018

- Students to implement 8 week health curriculum

March 2018

- Post Test

April – June 2018

- Posttest Analysis of Results using SPSS
- Work with DNP students in N475 to create poster presentations.
- Work with DNP students on the process of applying to present at conferences.
- Write-Up the results of the study.

July – December 2018

- Write a manuscript to be submitted to a peer reviewed journal.
- Present at Conferences .

## **Budget**

The entirety of the funds would benefit statistical support. Ed Lemay, PhD, is a statistician I have worked with in the past. \$2000 would cover the cost for 40 hours of analytic support.