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An Evaluation of Blogging as an Educational Tool for Interprofessional Education as Part of University Experiential Learning

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May, 2016

To the Dean of the Graduate School:

We are submitting a thesis written by Kelley Robb entitled, “An Evaluation of Blogging as an Educational Tool for Interprofessional Education as Part of University Experiential Learning”. We recommend acceptance in partial fulfillment of the requirements for the degree of Master of Science in Human Nutrition.

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AN EVALUATION OF BLOGGING AS AN EDUCATIONAL TOOL FOR
INTERPROFESSIONAL EDUCATION AS PART OF UNIVERSITY EXPERIENTIAL
LEARNING

A Thesis
Presented to the Faculty
Of the
College of Arts and Sciences
In Partial Fulfillment
Of the
Requirements for the Degree
Of
Master of Science
In Human Nutrition
Winthrop University

March, 2016

By
Kelley Robb

Abstract

Since the inception of the Internet, much of our society's communication has become paperless and instantaneous. The speed at which information can be disseminated has not only changed the way in which we communicate with each other but it has also increased the collaboration between professions, particularly the health sciences. As society shifts to a more virtual environment, it is imperative to assess these online tools to determine whether they elevate our research, educational methods and/or work environment. The purpose of this study was to evaluate whether blogging can be used as an educational tool for interprofessional education in a university setting around experiential learning. In this study, the experiential learning activity was a seven day Supplemental Nutrition Assistance Program (SNAP) Challenge where participants were challenged to live off of \$4.20 per day for seven days. Participation was available to all students and faculty at Winthrop University and was completely voluntary. The blog was one component of the challenge that aimed to create an informal, conversational forum for the participants of the SNAP Challenge to interact and potentially engage in Interprofessional Education (IPE) without any formal intervention. Results of this study showed that the blog was a valuable tool for promoting reflection amongst participants as well as interaction between participants. There was little evidence to support the blog contributing to interprofessional education due to a lack of participation by a variety of majors in the current study and should be evaluated in future research efforts. Due to the dearth research regarding the use of blogging as an educational tool, studies should examine blogging as a viable online teaching tool in higher education.

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Introduction

Since the inception of the Internet, much of our society's communication has become paperless and instantaneous. The speed at which information can be disseminated has not only changed the way in which we communicate with each other but it has also increased the collaboration between professions, particularly the health sciences. However, this change is not limited to the work environment. Our classrooms are changing too. Textbooks are digital, assignments and exams are administered online and grades are being accessed via student portals. As society shifts to a more virtual environment, it is imperative to assess these online tools to determine whether they elevate our research, educational methods and/or work environment.

Purpose

The purpose of this study is to evaluate whether blogging can be used as an educational tool for interprofessional education in a university setting around experiential learning.

Research Objectives

The objectives of this study include the evaluation of the use of a blog as a valuable tool for interprofessional education around experiential learning. By utilizing Online Research Methods (ORMs) (Walker 2013), this study aims to determine whether a blog can promote interprofessional education, enhance reflection and serve as a data collection tool. To date, no research has been identified that explores the use of blogging to enhance interprofessional education surrounding experiential learning.

Hypothesis

Participants of the Winthrop SNAP challenge from different academic departments who share their experiences on the SNAP Challenge blog, will engage in interprofessional education

via interaction on the blog.

Assumptions and Limitations

For this research, it was assumed that commenters of the blog were truthful in their responses, classification and major. It was also assumed that all participants in the Winthrop SNAP Challenge had access to the Internet. In addition to being students or faculty at Winthrop University, it was also assumed that the commenters of the blog were participating in the SNAP Challenge. Limitations for this study included the length of time in which the blog was utilized (16 days), as providing a timeframe limited the amount of participation on the blog. This study also could not determine the efficacy of blogs for IPE in all educational settings. Additionally, the coding analysis did not include a coder reliability test prior to conducting the coding scheme.

Literature Review

The reasons for which interprofessional education (IPE) should be administered to current and future healthcare professionals is to increase communication, team-work, problem-solving and conflict resolution skills (Barr, 2002.) IPE generally has been shown to occur either during or with on the job training or via employee workshops after students have become registered in their field. However, recent research has emerged suggesting that healthcare professionals receive this education prior to registration (Pollard & Miers, 2008; Hall & Weaver 2001). Barriers for implementing IPE in a university setting have included logistical, timing, faculty development incentives, access and scheduling issues (Hall & Weaver 2001). For this study, the use of blogging was introduced as a medium to conduct IPE in a university setting. It was an attempt to eliminate barriers presented by Hall & Weaver (2011) as well as provide an informal forum for student interaction. Previously, researchers had studied existing blogs about

specific topics or have had research participants create individual blogs to document their own experiences and reflections. For this study, a central blog served as a space where students from different academic disciplines participating in the same experiential learning activity could reflect upon their experiences.

Interprofessional Education (IPE)

Over the past decade, a body of research has emerged from the health science literature that supports the need for and reports the positive outcomes of IPE. IPE can be defined as ‘occasions when two or more professions learn with, from, and about each other aiming to improve collaboration and the quality of care’ (CAIPE, 1997; revised by Barr, 2002).

IPE aims to improve communication between professions, increase mutual respect amongst members of the team and enhance collaboration between health professionals (Banfield & Lackie, 2009). In a study conducted over the course of three years (2001-2003) by McNair, Stone, Sims and Curtis (2005), 91 students were selected to participate in a rural IPE project in Victoria, Australia. The students were at various academic levels and were from nursing, medical, pharmacy, or physiotherapy disciplines. The goal of the project was to expose students to the following categories of IPE based on Barr’s (1996) model; exchange-based (sharing of views), action-based (working collaboratively on a project, observation-based (shadowing different professions followed by discussion) and practice-based (assigning two or more students from different professions to the same placement) (Barr, 1996). Pre and post curriculum questionnaires were designed and used to determine whether the students felt that they achieved the desired outcomes. The results showed that the IPE experience “improved self-reported teamwork skills and knowledge and supported participating students’ belief in the value of interprofessional practice” (McNair, Stone, Sims and Curtis, 2005).

Additionally, IPE has been purported to improve is the negative stereotypes and assumptions professionals have in regard to others outside of their own discipline (Foster & Macleod 2015). In a large-scale study that spanned a course of four years, Foster & Macleod administered a pre-test and a post-test in a quasi-experimental design that evaluated “students’ stereotypical views of the other participants’ professions at the beginning and end of undergraduate studies.” The sample was comprised of students studying medicine, midwifery, nursing, occupational therapy, pharmacy, physiotherapy, podiatry, radiography and social work. They were split into two cohorts; one received IP, one did not. The researchers found that the group exposed to IPE had a decrease in stereotyping. They also noted that the findings suggested that the cohort who received the IPE intervention showed more moderation in their “beliefs about the characteristics of other professions and suggest more realistic views following IPE.” The researchers further reported “increased realism and moderation of stereotypical beliefs indicates a positive impact of IPE on undergraduate students in this study” (Foster & Macleod 2015). In a review study by Cook and Stoecker, a search of nine electronic databases examined quantitative studies that evaluated the presence and type of stereotypes held by members of interprofessional teams in the healthcare industry. While the particular stereotypes of each profession, both positive and negative, varied, it was found that “students generally rated their own profession more positively than other professions” (Cook and Stoecker, 2014). It was also noted that stereotyping could affect many aspects of healthcare practice, particularly in regards to decision-making (Cook and Stoecker, 2014). This further underscores the need for IPE.

In general, IPE studies have shown positive outcomes on students’ problem solving skills, shared learning and communication (Williams, Brown, McCook, et al, 2011). Based on

these research findings, it has been recommended that IPE be integrated into healthcare preregistration education (Department of health, 2000; Barr, 2002). There are additional benefits of IPE that have been demonstrated in the literature subsequent to this recommendation. Pollard, Miers, Gilchrist and Sayers (2008) conducted a longitudinal study over three years with students from ten professional programs of collaborative learning (also termed IPE) in the United Kingdom. They found that at each data point collection of the study, students were found to be positive about the IPE experience, particularly in the development of communication and team working skills (Pollard, Miers, Gilchrist and Sayers, 2008).

There are key components necessary to ensure IPE is successful for a program's participants and its outcomes. One key component identified by Thistlethwaite and Nisbet (2007) is the incorporation of an interactive element in the learning experience for the participants. In order for students to learn, problem-solve and collaborate together, they must actively interact in a way that can be documented and analyzed (Hammick, M., Freeth, D., Koppel, I. et al, 2007). Additionally, as seen in a study conducted by Earland, Gilchrist, McFarland and Harrison (2011), delivering IPE through online modules not only had a positive outcome on participation but was also preferred by the participants. In that same study, it was noted that an effective facilitator who could ensure appropriate behavior, was crucial to the success of the online IPE (Earland, Gilchrist, et al. 2011).

Hall and Weaver (2001) examined North American research articles studying and evaluating IPE in a comprehensive literature review. They found that two main concerns appeared consistently throughout the literature; "the need for specialized health professionals, and the need for these professionals to collaborate." They also found that the methods for teaching IPE varied greatly. An assumption derived from the literature is that IPE "teaching

methods are non-traditional, and include interdisciplinary problem-based learning (PBL), the service/learning model, and teaching strategies from feminist and poststructural theories” (Hall and Weaver 2001). However, with the recent integration of technology into professional and educational settings, the methods in which IPE are delivered still needs to be examined to determine the most effective delivery of IPE.

Due to the nature of IPE and the collaboration of many people from different backgrounds, education, expertise and professions, conflict is inevitable (Clarke, 2006). In a paper by Phillip G. Clark, the author argues that from conflict, greater understanding and insight can occur among participants. Therefore, conflict should not be expressly avoided but accepted as a path to deeper understanding (Clarke, 2006).

Blogging as an Educational Tool

The interactive medium proposed for use in this research project was a blog. As defined by Merriam-Webster dictionary, a blog (short for Weblog) is a website that contains online personal reflections, comments and often hyperlinks provided by the writer. Blogging has been characterized by an individual exploration of ideas of personal interest through frequent online posits, documenting ideas as they emerge over time (Freeman W., Brett C., 2012).

Originally, blogging was intended as a personal space on the Internet where one could write frequently about personal interests and/or experiences while uploading images and/or linking to other blogs. Educators have taken note of this increase in popularity and have begun to seek ways of integrating computer mediated communication tools at the university level (Halic, Lee, Paulus & Spence, 2010).

In a study conducted by Sim and Hew (2010), researchers identified a broad range of anticipated positive effects of blogging including improved analytical skills and reflective

thinking. Additionally, Ferdig and Trammell (2004) make a case that blogs have the “potential to promote interactivity, provide opportunities for active learning, increase student and teacher relationships, increase higher-order thinking skills, and improve flexibility in teaching and learning.” Results from another study indicated that blogs could create a platform to discuss the students’ own learning strategies in their own voices and provide teachers with insights on students’ understanding of key concepts (de Andres Martinez, 2012). It was also noted by Hall & Davison (2007) that students who author comments on blogs created by others, experience an enhanced process of knowledge construction through collective encouragement of reflective thinking (Hall, & Davison, B., 2007).

In addition to increased reflection, a study conducted by Murphrey (2010), also found that the use of technology supports the notion that interactive technologies “can be used to enhance the learning environment with experiential activities in an online course.” The researchers conducted a case study where they collected data from 27 students during two consecutive four-month academic semesters. During these academic semesters, woven into the curriculum were interactive technologies, such as online conferencing systems, screen recording programs and image capturing programs. These technologies were used with experiential learning activities. The data collection also included “reflections and observations of the instructor along with documents submitted by the students as part of the course” (Murphrey 2010). Additionally, the students were asked to submit a reflection paper “on their current level of knowledge and understanding in areas related to both the topic of instructional design and the use of technology in general” (Murphrey 2010). After coding the data, the researchers found that not only did the students portray a substantial amount of reflection but that the “student comments and course observations indicated that the use of technologies encouraged

experiential learning by allowing students to gain ownership of their ideas and communicate their ideas clearly” (Murphrey 2010). The researchers go on to say that the students felt that the technologies enabled “authentic submissions.” Since the course utilized an online format, the instructor indicated that the technologies enabled him/her to “hear the voice of the students” (Murphrey 2010). This idea of students being able to express and redefine their understanding of course concepts through their own words using a blog was confirmed in separate study by Dos & Demir (2012).

Blogs promote a sense of community through their comment sections and inter-linking capabilities. This helps to increase collaborative learning. In a study conducted by Chu, Chan and Tiwari (2012), evaluating two groups of students, from information management and nursing disciplines, it was found that information sharing was rated as one of the top two perceived values of blogging. In another study conducted by Lee and Bonk (2015), analyzing “peer relationships and online interactions in a blended class using blogs,” the research also showed that blogging creates a “stronger sense of community” (Lee and Bonk, 2015).

While much of the research reported findings is on individual participant’s blogs, a study conducted by Fessakis, Tatsis and Dimitracopoulou (2008) had seven students from a “mathematics instruction” course use one central blog for assignments and interaction. The results of this study indicated that the blog allowed students to “coordinate and communicate” proficiently without being in a classroom. Additionally, the researchers concluded that the students had a “high learning experience, which contained a high density and long duration dialogue relative to the learning content, as well as opportunities for collaboration and reflection” (Fessakis, Tatsis, and Dimitracopoulou, 2008).

Online Research Methods (ORM)

Learning environments have shifted to a more virtual format, which has led to emerging Internet based research methods known as Online Research Methods (ORMs.) While ORMs are a relatively new research method, they have “become a dynamic tool for social scientists” (Tulbure 2015.) Due to the increase in popularity, recent articles have been published that outline a framework for the methods included in ORMs.

In an article published by Tulbure (2015), ORMs are placed into five distinct categories. The first is the nonreactive Internet based method, where researchers “refer to analyzing existing datasets and/or text collection that are available over the web.” Examples of these include virtual groups and discussion forums. This method allows the research to observe interaction and comments without any intervention. The second, most used ORM, is that of a web survey. This type of ORM utilizes a questionnaire developed by the research team that is distributed electronically to potential participants. The third type of ORM utilizes Web-based tests. This method first became popular about 20 years ago with the creation of free online tests such as online personality tests, similar to those found in magazines. However, as the Internet has grown, various professionals and groups utilize these types of tests for achievement, ability, personality, attitude, value and interests. Essentially, any web-based test can replace a pencil and paper test. The fourth category of ORMs is a Web experiment. This type of ORM replaces traditional laboratory experiments by conducting the experiment virtually using a range of methods including simulation. The final ORM category included in this outline compiled by Tulbure (2015) is the Internet-supported intervention. This refers to “all forms of computer-aided therapy, including Internet-supported interventions.” Unlike the ORMs previously

mentioned, this method can be delivered via any media or device and does not necessarily require Internet access.

Results of ORM studies have shown that ORMs can provide efficient and innovative methods for collecting data (Walker, 2013, Coomer, 1997, Wakeford and Cohen, 2008). Additionally ORMs and the utilization of the Internet has helped to increase access to participants whom researchers may not have been able to reach using traditional methods (Walker, 2013; Tulbure, 2011; Levine, Madsen, Wright, et al, 2011). In a two-part article published by Walker (2013), the researcher outlined the benefits of ORMs for nursing research. The benefits of economy, safety, speed and interaction are identified by Walker, (2013) have been confirmed in an article by Hanley (2011), who also identifies participant's preferences for the medium to be an advantage. It was believed that ORMs can also be applied to health services research in general (Walker, 2013.)

Methodology

Overview

This study aimed to create an informal, conversational forum for the participants of the Winthrop SNAP Challenge to interact and potentially engage in IPE without any formal intervention. Eligible study participants included all students, faculty and staff, 18 years of age or greater, who chose to participate in the campus-wide Winthrop Snap Challenge. The Challenge took place from January 22nd, 2015 to January 29th, 2015. Participation in the blog was an optional component of this challenge. In order for a participant to comment on the blog, they were required to consent to participate which included an agreement to enter their classification (i.e. undergraduate, graduate, faculty, or staff), academic major and to create a username (in lieu of their actual name) that appeared on the comment. This enabled the

researchers to track the interaction within and between academic majors and classifications. It also allowed the researchers to determine which classification group and/or majors participated in discussion on the blog most. Additionally, there was a pre and post-survey regarding IPE to evaluate whether the participant's attitudes towards IPE improved over the course of the SNAP challenge. There was also a short anonymous survey posted on the blog on the final day of the SNAP challenge meant to evaluate the participants' feelings about the blog as a tool.

Design

A qualitative, nonreactive Internet based research method design as described by Tulbure (2011) was used for this study. This study was part of a larger research project where the experiential learning activity served as the intervention. The blog was set up as an asynchronous forum where the participants could log on at anytime to post a comment or respond with a comment to any blog post, regardless of whether it was the day's post or three days before (Hanley, 2001; Levine, Madsen, Wright et al 2011). Since the participation in the blog represented self-selection into the study and there was minimal intervention by the blog administrator (research team), the researcher was able to observe the virtual interaction in their "natural context."

Participants

The subjects of this study were the participants of the SNAP challenge at Winthrop University. These participants varied in age and class standing but all were enrolled at Winthrop University or were faculty members at Winthrop University. While the challenge was open to all students, there were specific majors that were encouraged to participate. Students enrolled in Community Nutrition were required to participate in the SNAP Challenge but not required to participate in the accompanying research activities. Those activities were optional.

SNAP Challenge Guidelines

Each person could spend no more than a total of \$29.40 on food and beverages during the Winthrop University SNAP Challenge week. All food purchased and eaten during the Winthrop University SNAP Challenge week, including groceries, fast food, dining out and campus dining, had to be included in the total spending. If participants ate in restaurants, they were allowed to box up their leftovers to eat later as long as the meal(s) fit within their budget. If participants had a Winthrop meal plan, they could eat in campus dining halls and use Café Cash to purchase food. However, those expenses were required to be included in their total budget. For meals eaten in the Thompson Cafeteria, the following costs were assigned: breakfast \$6.00, lunch \$7.00 and dinner \$8.00. During the SNAP Challenge, participants were only allowed to eat the food purchased for the project. They were not able to eat food that had been purchased previous to the challenge week (this did not include spices and seasonings). Participants were instructed to avoid accepting free food from friends, family, or at work, including at receptions, meetings or parties and to keep track of receipts on food spending and take note of their experiences throughout the Challenge week.

The guidelines, scripts, handouts, and flyers were created in conjunction with another researcher, Susan Tyler Wallace Harding. The guidelines for the SNAP Challenge were disseminated through various communication outlets. The research assistants (see Appendix B), with the permission of the professors, visited classrooms and read from a prepared script (see Appendix E) which outlined the details of the SNAP Challenge. The flyers posted around campus as well as the handouts given to potential participants can be found in Appendices C, D and F. (Wallace Harding, 2015.)

Instrumentation

The Winthrop SNAP challenge blog was created as well as a Facebook page and Twitter account by the researcher. The purpose of a multi-platform approach was to provide easier access to the blog. The posts on the Facebook and Twitter accounts simply had the title of the twice-daily blog post, by the researcher, along with a link to the actual blog. Commenting capabilities were disabled on these accounts. All accounts shared the name WinthropSNAPChallenge and an associated hashtag #WinthropSNAPChallenge was utilized to promote interaction and track activity. The blog was open to the public. The landing page or homepage displayed the most recent blog post by the researcher with associated comments. At the end of each post there were links to related entries from previous posts. The tabs were created across the top of the blog linking to information regarding the Winthrop SNAP Challenge in the news, the research team, additional resources, blog etiquette, instructions for posting a comment and a list of challenge guidelines.

The blog went live two days prior to the SNAP challenge; was open during the seven-day period of the SNAP challenge and was kept live seven days after the SNAP challenge was completed. Each day, for nine days, there were two posts by the researcher, one in the morning and one in the evening. Each post had a theme and ended with a question that prompted the participants to respond in the comment section of the blog. The administrator of the blog was Kelley Robb, the primary researcher. Any posts by the administrator on the blog was labeled on the blog as “Administrator.”

Participant comments were monitored by the administrator each hour between 7am and 9pm daily, from the time the blog was live through the seven days after the SNAP challenge had ended. Comments on the blog were not edited unless the Administrator and/or research team felt that they may have endangered the participants or the challenge, or if there was a complaint from

a participant regarding a specific comment. The etiquette guidelines were also posted on the blog for commenters and participants to read and reference (see Appendix H.) If a comment needed to be deleted from the thread, the Administrator would notify the research team and update the blog with a post explaining the decision to delete the comment. When the Administrator posted a comment on the blog, the name “Administrator” appeared.

To encourage participation, participants were eligible to win a small prize each day. Each participant received one entry into the prize drawing per comment on the blog. Students who were required to participate in the SNAP challenge by their teachers may have also received extra academic credit for participation in the blog. This further incentivized students to participate in discussion on the blog.

Two days prior to the Winthrop SNAP Challenge start, the blog had administrator posts meant to probe for concerns, struggles and feelings participants were experiencing related to the anticipated start. The posts during the seven days of the challenge focused on trends that the SNAP challenges performed in previous years had seen, as well as additional topics that nutrition students and faculty identified as important during the project development. During the seven days after the Winthrop SNAP Challenge finished, the posts examined the participants’ feelings about the challenge, the efficacy of the blog and general opinion of the experience. An example of a question posted to the blog is “How are you feeling? What have been the biggest challenges so far? What have you done to address them?” See Appendix G Blog Posts.

Ethical Considerations

This study was submitted and approved by the Internal Review Board (IRB) at Winthrop University (see Appendix J.) Participation of this study was completely voluntary. A link to the

informed consent agreement was provided in the first blog post by the administrator and was kept as a static page with a tab at the top of the homepage allowing easy and quick access for participants at any given time (see Appendix A.) Participants of the blog were not required to enter in any personal information that would allow for the researchers or other participants to identify them. Further precautions were taken by stating that any participants that shared any psychological and/or emotional problems in relation to their participation of this research study would be referred to the health counseling services onsite at Winthrop University. Additionally, all comments were monitored by the administrator between 9am and 7pm daily, to ensure there were not any hostile, threatening, or harmful tones or messages. The blog was made private (only accessible to the administrator) two weeks after the end of the SNAP challenge. The blog will be disabled June 1st 2016, at which point materials will be downloaded and archived in the faculty advisor's password protected computer. The disposal of the data and research materials including the shredding of any paper copies and the deletion of all digital files will occur on June 1st, 2018 or later if needed for further assessment.

Data Analysis

Descriptive statistics were employed to characterize participant classification, area of academic study, frequency of blog responses, responses to comments and tone of all comments. Participant perceptions of the use of the blog as a learning tool were also assessed. To extract data from the blog, content analysis, a technique which has been utilized in other blog studies assessing online interactions, was employed (Chang and Chang, 2014; Hall & Davison, 2007; Herring, Scheidt, Bonus and Wright, 2004; Kay, 2006; Kember et al., 1999; Swain, 2006.) In order to ensure the most accurate and appropriate coding, the primary researcher, the faculty advisor and a research assistant performed coding for each comment independently.

Coding Process and Procedures

A direct coding scheme as suggested by Hall and Davison (2007) and used by Chang and Chang (2014) was utilized to code the data in this study. There are three independent dimensions that categorize the comments: Reflection, Propositional Stance and Affective Tone (see Appendix I.) The researcher, faculty advisor and research assistant coded the responses according to the coding scheme used by Chang Y. J. & Chang Y.S., (2014). The coders coded the blog responses based on a dimensional analysis scoring the rate of Reflection (is the commenter responding to the original blog post? If so, does the commenter provide substantial reflection?), Propositional stance (does the commenter agree with the original blog post? Mixed? Or disagree?) and Affective Tone (Is the comment negative? Neutral? Or positive?).

Each blog response had a unique number assigned to it. The blog responses were provided to the coders in an excel spreadsheet that allowed them to follow the row across to enter in their assessment of the blog response with the correlating blog question. The following steps were followed for each blog response:

1. Read the blog question
2. Read the Comment response to that blog question
3. Assign a number following the Coding table below assessing the Reflection, Propositional Stance and Affective Tone of that comment (0,1,2)

To assess reflection, blog responses that received a “0” were considered “Context-free.” These responses were made out of the context of the original administrator blog entry. Blog responses that received a “1” were deemed “Non-Reflective.” These blog responses were made without demonstrating perceivable reflection on the original administrator blog entry. The

highest score a blog response could receive was a “2”. Blog responses that received a “2” were comments made with substantial reflection.

For the analysis of propositional stance a similar “3” number rating was used. Blog responses that received a “0” were identified as responses that “Disagreed” with the original administrator blog entry. These comments showed disagreement with the original points of the administrator blog entry. Blog responses that received a “1” were considered “Mixed.” These were comments showing agreements on some points of the original entry but disagreeing with others. The responses that received a “2” “agreed” with the administrator’s original blog entry. These responses were in agreement with the stance of the original entry.

The last dimension that was analyzed was the affective tone of the blog response. Responses that received a “0” were considered “Negative.” These were responses that were hostile or destructive. The responses that received a “1” were deemed “Even.” These blog responses were made with a neutral affection. The blog responses that received a “2” were perceived as “Positive.” These blog responses were made with a positive tone.

Statistical Analysis

Descriptive statistics were employed through the use of SPSS statistical analysis software (IBM Corp. Released 2013). This software describes the data through measures of dispersion and measures of tendency.

Results

Demographics

Demographics for this study were captured and are reported by comment rather than by participant. Although it was not required, many participants included their name in each of their responses, which allowed the research team to run statistical analysis on gender. As seen in

Table 1, the majority of the participants were female. A requirement of the blog responses was that the participant includes their academic major. Table 2 shows that almost all participants of the blog were nutrition majors. Another requirement of the blog was that all participants identify their academic classification. Table 3 shows that the two main groups of participants, 88.5% respectively, classified themselves as either a senior or graduate student.

Table 1. Demographics by Gender

Blog participation by gender as a percentage of the total blog comments ($N=166$)

<u>Gender</u>	<u>Percentage</u>
Male	4.2
Female	84.3
Unspecified	11.4

Table 2. Demographics by Major

Blog participation by nutrition versus non-nutrition majors as a percentage of the total blog comments ($N=166$)

<u>Major</u>	<u>Percentage</u>
Nutrition	90.4
Non-Nutrition	7.2
Did Not Specify	2.4

Table 3. Demographics by Classification

Participation in the blog by classification as a percentage of the total blog comments ($N=166$)

<u>Classification</u>	<u>Percentage</u>
Freshman	0.6
Sophomore	0.6
Junior	4.8
Senior	26.5
Graduate	62
Faculty	1.2
Did Not Specify	4.2

Blogspot™ Web Publishing Service Generated Blog Statistics

The blog was generated on Google’s platform, Blogspot™ web publishing service. A feature of Blogspot™ web publishing service is that it automatically generates statistics regarding the operating systems, pageviews and browser entries of the blog. As seen in Table 4, the top three device operating systems used by viewers of the blog were from Windows, MacIntosh and iPhone devices.

Table 4. Blogspot™ Web Publishing Service Generated Blog Statistics by Device

Percentage of total page views by entry of device operating system (N=2780)	
<u>Operating system entry</u>	<u>Percentage</u>
Windows	37
Macintosh	33
IPhone	20
Android	4
IPad	3
Other Unix	<1
Linux	<1
BB10	<1
Unknown	<1
iPod Touch	<1

In addition to analyzing the operating systems used to access the blog, Blogspot™ web publishing service automatically generates the number of views per static page. The term static web page means that the content of the web page, or in this case the blog question and/or information pages posted by the administrator, does not change and is the same for all viewers at any time. There are two types of pages outlined in Table 5. The first is the “Static Blog Page.” For this study, the “Static Blog Page” refers to the pages that participants could access by clicking on their corresponding tab across the top of the blog homepage. These pages were available to participants at all times and provided information regarding informed consent, posting a comment, Winthrop SNAP challenge in the news, challenge guidelines, resources, the

research team and blog etiquette. Of these pages, the “Posting a Comment”, “Winthrop SNAP Challenge in the News” and the “Challenge Guidelines” were viewed the most. The second type of static web page was the Administrator’s blog post. These pages refer to the blog questions posted to the participants twice per day. Although Table 5 shows a fairly consistent number of pageviews throughout the challenge, the first three days had the highest pageviews. It is important to note that pageviews does not correlate with comment frequency.

Table 5. Blogspot™ Web Publishing Service Generated Pageview Statistics

Number of page views per static blog page and blog comments	
Static blog page (<i>N</i> = 286)	Page views
Posting a Comment	81
Winthrop SNAP Challenge in the News	75
Challenge Guidelines	62
Resources	33
Research Team	24
Blog Etiquette	6
Informed Consent Agreement	5
<u>Administrator’s blog post (<i>N</i>= 609)</u>	
Sharing the Challenge	112
Welcome to the Winthrop Snap Challenge	78
Day One	75
Eating on the Go	68
Meal Prep	56
Super-Sized or Under-Sized	46
Food and Feelings	46
Lessons Learned	44
Difficult Changes	42
To Plan or Not to Plan	42

Participant Interaction

In order for a blog comment to qualify and be counted as interactive, it must have been made in response to another participant. If the comment strictly answered the question posted by the administrator on the blog post, it was not counted as an interactive comment. According to the above outlined parameters, as shown in Table 6, approximately one third or 32.5% of the comments on the blog were in response to a comment posted by another participant.

Table 6. Participant Interaction

Participants interacting with others via the blog as a percentage of total blog comments ($N=166$)	
<u>Comment</u>	<u>Percentage</u>
Interacted with another participant	32.5
Did not interact with another participant	67.5

Interprofessional Interaction

In order for a comment to be identified as an interprofessional interaction, the comment must have met two criteria. The comment must have been in response to another participant and the participant with whom they were responding to must have been from a different academic major. The interprofessional interaction is labeled as “between majors” in Table 7. As shown in Table 7, 2.4% of the interaction identified in Table 6 were considered to be interprofessional interaction.

Table 7. Interprofessional Interaction

Responses between majors as a percentage of total blog comments (N=166)	
<u>Comment</u>	<u>Percentage</u>
Within major	28.3
Between majors	2.4
General comments	0.6

Dimensional Analysis of Responses

To determine reflection, stance and tone of each comment, Chang & Chang's coding scheme was employed. For reflection, a code of "0" signified that the comment was context-free, meaning that the comments were made out of the context of the original entry. If a comment received a code of "1", it was labeled as non-reflective meaning that the comment was made without demonstrating perceivable reflection on the original entry. A code of "2" was assigned to a comment, which meant that the comment was reflective and showed substantial reflection. To evaluate propositional stance, a "0" code meant that the comment disagreed with the original point of the blog post by the administrator. A "1" meant that the comment showed agreement on some points of the original post but disagreed with others and a "2" code meant that the comments were in agreement with the stance of the original entry. In terms of affective tone, a "0" identified the comment as being negative, a "1" identified the comment as having an even tone and a "2" meant that the comment had a positive tone. After the researcher, research advisor and research assistant coded the content, any comments that had differing coding scores were discussed. Although there were some initial discrepancies, after reviewing and discussing the responses in question, a consensus was reached and no response was thrown out. According to these parameters, Table 8 shows that of the 166 comments, at least 94% showed substantial reflection, agreed with the original blog post entry and had a positive tone.

Table 8. Response Dimensional Analysis

Frequency of occurrence of individual dimensions as a percentage of total blog comments (N=166)

<u>Reflection</u>	<u>Percentage</u>	<u>Propositional stance</u>	<u>Percentage</u>	<u>Affective Tone</u>	<u>Percentage</u>
Reflective	94.0	Agree	99.4	Positive	94.6
Non-reflective	4.8	Mixed	0.6	Even	4.8
Context-free	1.2	Disagree	0	Negative	0.6

Comment Frequencies

Table 9 identifies the number of comments per Challenge day. The Challenge Days -1 and -2 are the two days prior to the official start of the SNAP Challenge. On those days, the administrator posted pre-Challenge questions. The start of the SNAP Challenge began on Challenge Day 1. According to Table 9 the days with over 10% of the total comments throughout the week were on days -1, 1, 5, 6 and 7. The day that had the most comments was day seven of the SNAP Challenge.

Table 9. Comment Frequencies

Responses per challenge day as a percentage of total blog comments (N=166)

<u>Challenge Day</u>	<u>Percentage</u>
-2	1.2
-1	11.4
1	10.2
2	4.8
3	4.8
4	8.4
5	10.2
6	13.3
7	17.5

Other Findings

All comments were deemed appropriate by the primary researcher and there were no complaints regarding any comments, all comments were unedited by the Administrator. Since

87% of the interactive comments were level one responses, meaning that they were responding directly to the commenter and the thread was not continued, no significant threads were identified. Additionally, all comments adhered to the Blog Etiquette found in the appendices of this proposal. There were too few respondents to the IPE questionnaires posted on the blog to report any findings. Also, very little traffic to the blog were produced through the Twitter and Facebook pages.

Discussion

This study set out to determine whether a blog could be used as a platform for IPE during an experiential learning activity. There were three main parameters that were outlined by the researcher to assess the value of the blog. These measures included whether the blog could promote interprofessional education, enhance reflection during the experiential learning activity and/or serve as a data collection tool. In order to make conclusions regarding these parameters the demographics of the participants, Blogspot™ web publishing service generated statistics, interaction between participants, reflection of the comments, propositional stance of the comments, tone of the comments and the frequency of the comments were analyzed.

There were a total of 7 comments made by males, 140 made by females and 19 of which were not identified as male or female. Of those comments, 150 were from nutrition majors while only 12 were from non-nutrition majors, with 4 comments not specifying a major. Since Winthrop's University's nutrition program was predominantly female and 90% of the commenter's were from the nutrition program, it would be reasonable to assume that the demographics of the nutrition department is reflected in the demographics of the blog comments. The high number of nutrition student participants may also be attributed to the experiential learning activity of the SNAP Challenge itself. Participating in the SNAP Challenge activity was

given as an assignment and/or extra credit in more nutrition based classes than non-nutrition classes. This may have also affected the classification outcome because the nutrition classes that integrated the challenge and/or blog into the curriculum were higher-level courses. Additionally, nutrition students may have been more responsive to the blog posts since the content of the blog posts included food, nutrition, meal planning, food and beverage choices and food budget. An example of a blog post that was nutritionally focused was “So tell us, how is the challenge affecting your fruit and vegetable intake? How has this challenge impacted your overall food selection? What changes have you made? Did you have any particular strategies for grocery shopping?” A response from a graduate student studying nutrition was “I do wish I'd more carefully considered produce sources, but did include whole carrots, cabbage and some frozen options for their lower prices. I also focused on a rice and beans based meal plan to save money, with meat used only for accent in most meals.” Due to the homogenous nature of the participants, this study was not able to establish substantial IPE with respect to majors. However, it should be noted that IPE may have occurred within majors. The nutrition graduate program at Winthrop University is comprised of over 50% second-career students. This means, that half of the graduate students have undergraduate degrees and professional experience in different fields. Additionally, the graduate school also has students who may not have professional experience in another field but received their undergraduate degree in another field. Since 62% of the participants of this study were graduate students, there may have been IPE occurring that was not being measured due to the design of the study. It may also indicate that peer-to-peer learning occurred because of the interaction between participants via the blog.

The Blogspot™ web publishing service generated statistics help to identify which devices were used to access the blog. According to this study, most participants used desktops and/or

iPhones to view the blog. Not only does this indicate the preferred devices but it also shows that 24% of the time participants were checking the blog away from their desks. This also indicates that participants may have been commenting in real-time. Therefore, for any future studies it is imperative that the blog is accessible, viewable and easy to comment on from not only desktops but also mobile devices. These statistics support the use of a blog as a valuable data collection tool because the participants were able to access and comment on the blog from anywhere and at any time.

As mentioned by Walker (2013) “the Nielsen Company reported that in 2011 there were 181 million blogs around the world, an increase of 145 million since 2006.” This surge in popularity for blogging shows an emerging preference amongst newer generations on how they want to receive, disseminate and discuss information. However, as noted by Henley (2011) via Webopedia, blogs were initially established to ‘provide a web page that serves as a publicly accessible personal journal for an individual.’ For this study, the purpose of the blog was not to serve as a journal for a participant. Rather, the blog administrator served as a facilitator as described by Earland, Gilcrist, et al. (2011). In the current study, the administrator sought to promote reflection and interaction by providing probing questions twice per day and ensuring appropriate and safe dialogue was being used in the comment section of the blog. A blog was selected as the format in order to encourage informal, conversational discussion and reflection. Since this current study is the only identified one examining interaction via comments on a blog, a baseline of success has not been established for interaction. The current findings of 30% of the responses posted to the blog being interactive was felt to be a significant baseline. As identified by Hammick, M., Freeth, D., Koppel, I., et al, 2007, learning requires interaction in a way that can be documented and analyzed. Hall & Davison (2007) also noted students who author

comments on blogs experience an enhanced process of knowledge construction through collective encouragement of reflective thinking (Hall, & Davison, B., 2007.) Within these contexts, the interaction on the blog found in this study represents peer-to-peer learning. Although there was substantial interaction, due to the lack of non-nutrition academic major participants, there was little IPE occurring via the blog.

These findings showed that almost all participants had substantial reflection in response to the blog question. There may be two factors that contributed to the extremely high rate of reflection. The first is that the type of experiential learning activity (the SNAP Challenge) promoted more reflection due to the nature of the activity. Secondly, the majority of the responses on the blog came from students who were either seniors or graduate level students. The higher level of education around food issues could contribute to the high level of reflection seen in the responses. The propositional stance and affective tone may have also been high due to the demographics of the participants. Since the majority of the participants were academic nutrition majors, they tended to have similarly formed opinions. Since this experiential learning activity was directly relevant to their academic major, they also seemed to share a positive outlook on the activity. This data supports the notion that blogs can help to enhance reflection amongst participants while providing a safe environment to share their thoughts and experiences.

While the frequencies of comments were generally consistent throughout the SNAP Challenge week, days -1, 1, 5, 6 and 7 all had above 10% of the total comments throughout the challenge as noted in Table 9 Comment Frequencies. The theme of the blog posts for those days were formulating plans, discussing the challenge with family and friends, food selection and lessons learned (See Appendix G Blog Posts.) Although all of the questions were opened-ended and asked in a conversational manner, these topics may have been the most popular since they

focused on the individual and self-reflection. These topics also required an explanation, whereas, other blog posts were more direct and received more succinct, straight-forward responses. Because the blog was asynchronous, participants could choose to comment on any blog post on any day, validating that these blog posts were in fact the most popular. These results indicate that the type of blog posts may contribute to participation and reflection, which should be evaluated in future studies.

There was another finding worth noting in this study that was worth noting. It was found that 98.8% of the comments were responses to the administrator's blog question, which may indicate that an administrator asking questions is needed in order to not only prompt responses but also to promote interaction between participants.

Conclusion

This study found that blogging enhances reflection during experiential learning activities, provides an easily accessible place for students to interact and is a valuable data collection tool for research. These findings also confirm Walker's (2013) conclusion that the benefits of ORMs include economy, safety, speed and interaction, which suggests that their findings can be applied to all health sciences, not just nursing research. However, our results did not show that using a blog was a valuable tool for IPE due to participant characteristics. As discussed in demographics, future studies should identify students that hold undergraduate degrees, students that have had professional experience in fields that differ from their current major, as well as focus on using alternative methods, such as recruitment or required participation in educational setting, to promote the experiential learning activity to increase the number of participants from different academic majors. Further research needs to be conducted utilizing blogs as a forum for interaction in higher education instead of personal diaries or journals. Additional studies should

also pursue evaluating blogging as a tool for IPE and analyzing comments for themes, patterns and/or educational growth amongst participants.

Future Research Implications

There are a few concepts identified in this study that require further research. The first is that there is not a sufficient body of literature examining the value of blogging as an educational tool, suggesting that more studies need to be done. Secondly, additional studies that include participants from various academic majors should be conducted to evaluate whether the use of a blog for IPE is effective. Thirdly, this study shows that future research needs to be done evaluating the content of blog comments, such as time, budget, food choices, etc., for participants of the SNAP Challenge experiential learning activity. Lastly, further studies are needed to evaluate whether blog posts created by the administrator/facilitator have an impact on the number and type of responses from the participants. More specifically, evaluating whether more open-ended, debatable and conversational blog questions contribute to participation and interaction.

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Appendix A: Informed Consent Language

The language below will be posted under an informed consent tab on the blog. Reading the language and selecting to comment on the blog and/or partake in the questionnaires posted on the blog serves as agreement to participate and constitutes participant acknowledgement of the Informed Consent Agreement and their voluntary participation in the research.

Informed Consent Agreement

Thank you for considering commenting on the blog, which is a part of Kelley Robb's thesis research. This study is in addition to the week-long SNAP Challenge at Winthrop University scheduled from January 22, 2015 through January 28, 2015. The comments on the blog along with the questionnaires posted on the blog will be used to gather your thoughts about participation in the SNAP Challenge. The questionnaires should take anywhere from 5-10 minutes. Your participation is completely voluntary. It is not required that you comment on the blog or take the questionnaires posted on the blog in order to participate in the SNAP Challenge. You may stop the questionnaire or refuse to answer any questions without penalty at any time.

These questionnaires are anonymous as no personal identification information will be gathered. Only the researcher and thesis committee members will have access to the questionnaire data during the analysis process.

There is no compensation to you for participation in the blog or SNAP Challenge; however, it is expected you will learn more about poverty through the process. The risks are minimal with only the inconvenience of the time needed to complete the questionnaire, post comments on the blog, and participate in the challenge.

If you have any questions or concerns about the research you can contact Kelley Robb, RobbK2@winthrop.edu. You may also contact my faculty advisor Dr. Simone Camel at camels@winthrop.edu.

Appendix B: Human Nutrition Graduate Student Research Assistants

Research assistants are all Winthrop Human Nutrition graduate students who have completed Citi Training and have completed or are currently completing the graduate-level Research Methods course (NUTR 607). They will only be involved in facilitating the initial information sessions in Winthrop University classrooms to explain the SNAP Challenge and encourage participants to register by completing the pre-test questionnaire. These researchers include:

Hannah Anderson
Kate Bennett
Rebecca Brangan
Kelly Brooks
Briana Cates
Lauren Cobb
Shelby Cook
Taresa Farina
Miranda Gartman
Linsey Jenkins
Rachael Mitchum
Rhya Pachin
David Stoner
Susan Tyler Wallace
Alexis Wolfgang
Raven Wright
William _____

Appendix C: SNAP Challenge Flyer



Appendix D: SNAP Challenge Guidelines

Winthrop University SNAP Challenge

How long will the Challenge Last? 7 days: Thursday, January 22 – Wednesday, January 28, 2015

SNAP Challenge Guidelines:

1. Each person should spend no more than a total of \$29.40 on food and beverages during the Challenge week.
2. All food purchased and eaten during the Challenge week, including groceries, fast food, dining out and campus dining, must be included in the total spending. If you eat out you may box up your leftovers to eat later as long as the meal(s) fit within your budget.
3. If you have a Winthrop meal plan, you may eat in Thompson Cafeteria and use Café Cash to purchase food. However, these expenses should be included in your total budget.

For meals eaten in the Thompson Cafeteria, the following costs have been assigned:

Breakfast:	\$6.00
Lunch:	\$7.00
Dinner:	\$8.00

4. During the Challenge, only eat of that you purchase for the project. Do not eat food that you already own (this does not include spices and seasonings).
5. Avoid accepting free food from friends, family, or at work, including at receptions, meetings or parties.
6. Keep track of receipts on food spending, and take note of your experiences throughout the Challenge week.

Social Media:

If you decide to take the challenge we welcome posts using the hashtag

#WinthropSNAPChallenge

Facebook: <http://www.facebook.com/groups/TBD>

Twitter: @WinthropSNAPChallenge

Blog: WinthropSNAPChallenge.blogspot.com

Resources:

- **SNAP Ed Connection:**
<http://snap.nal.usda.gov/>
- **Good Food on a Tight Budget:**
<http://www.ewg.org/goodfood/>
- **Recipes and Tips for Healthy, Thrifty Meals:**

www.cnpp.usda.gov/sites/default/files/usda_food_plans_cost_of_food/FoodPlansRecipeBook.pdf

- **Good and Cheap:**

<http://static.squarespace.com/static/52f120cfe4b0bf8fcb650b3e/t/53f4441ae4b08fc795a1a352/1408517146323/good-and-cheap.pdf>

Questions? Contact Tyler Wallace at Wallaces14@winthrop.edu

Appendix E: SNAP Challenge Information Session Script

Research Assistant: Hello, my name is _____. I am a Human Nutrition student assisting with data collection for Tyler Wallace's thesis project.

Beginning on Thursday, January 22 and continuing until Wednesday, January 28, Winthrop University will host a week-long SNAP Challenge. SNAP stands for the Supplemental Nutrition Assistance Program, formerly known as food stamps. SNAP is a major federal nutrition program that provides benefits to purchase food for eligible participants.

If you choose to participate in the Challenge you will commit to spending no more than \$29.40 on your food and beverage purchases during the week. This equates to \$4.20 per day which reflects the benefits received on average by SNAP recipients in North and South Carolina. This activity challenges you to test your budgeting and planning skills. Essentially, can you maintain an adequate diet on \$4.20 per day?

This is a completely voluntary challenge. We would love for you to participate. If you are up for the challenge please also consider participating in a graduate student research project related to evaluating the SNAP Challenge. Your participation in the study is completely voluntary, and it will involve completing two brief online questionnaires: one before the SNAP Challenge begins and one after it ends. If you are willing to assist with this research please complete the first online questionnaire now at [<link to questionnaire on Qualtrics>](#). It should take no more than ten minutes to complete and you can use your phones or other electronic devices (Assistant writes website on board and students complete questionnaire in class with personal technology).

(Students complete pre-test questionnaire. After all have finished continue with script.)

Now I will review the Challenge guidelines (Assistant passes out handouts with the guidelines). I am also passing around a blank sheet of paper for you to write your Winthrop email address if you are considering or have decided to participate in the SNAP Challenge. Your email will only be used to send you the link to the final online questionnaire to gather your thoughts after the challenge ends. It will not be used for any other purpose and will be deleted from any research materials after the Post-SNAP Challenge Survey closes on February 8, 2015. There will not be any way for the researchers to link your email or identity to your questionnaire responses.

SNAP Challenge Guidelines

1. Each person should spend no more than a total of \$29.40 on food and beverages during the Challenge week.
2. All food purchased and eaten during the Challenge week, including groceries, fast food, dining out and campus dining, must be included in the total spending. If you eat out you may box up your leftovers to eat later as long as the meal(s) fit within your budget.

3. If you have a Winthrop meal plan, you may eat in Thompson Cafeteria and use Café Cash to purchase food. However, these expenses should be included in your total budget.

For meals eaten in the Thompson Cafeteria, the following costs have been assigned:

Breakfast:	\$6.00
Lunch:	\$7.00
Dinner:	\$8.00

4. During the Challenge, only eat of that you purchase for the project. Do not eat food that you already own (this does not include spices and seasonings).
5. Avoid accepting free food from friends, family, or at work, including at receptions, meetings or parties.
6. Keep track of receipts on food spending, and take note of your experiences throughout the Challenge week.

While the goal is to complete as much of the seven-day SNAP Challenge as possible, we realize it is a challenge. We ask that you still submit the post-SNAP Challenge Questionnaire even if you weren't able to complete the entire challenge. This information is valuable for the research being collected on the experience. After the SNAP Challenge ends on January 28, 2015, be on the lookout for an email reminder with a link to the final questionnaire.

Are there any questions? (Assistant takes questions)

During the Challenge we ask that you share your experience on our blog at **WinthropSNAPChallenge.blogspot.com**. You can also post to our Facebook page (<http://www.facebook.com/groups/TBD>) and Tweet us at **@WinthropSNAPChallenge**. Use the hashtag **#WinthropSNAPChallenge**.

Thank you for your time. If you have any questions about the Challenge please contact Tyler Wallace Wallaces14@winthrop.edu.

Appendix F: SNAP Challenge Information Handout

Winthrop University SNAP Challenge



Thursday, January 22, 2015 – Wednesday, January 28, 2015

What is SNAP?

SNAP stands for Supplemental Nutrition Assistance Program, formerly known as food stamps. It is a major federal nutrition program that provides benefits to purchase food for eligible recipients.

What is a SNAP Challenge?

In a SNAP Challenge, participants follow a restricted food budget for a set period of time that reflects the average daily SNAP / food stamp benefit.

Could you live on \$4.20 a day?

Take the SNAP Challenge and find out.

Learn more at one of the information sessions

Thursday, January 15 11:00 am Room 114, DiGiorgio
Campus Center

Thursday, January 15 5:00 pm Room 115, Kinard

Questions? Contact Tyler Wallace - Wallaces14@winthrop.edu

Appendix G. Blog Posts

January 20th

8:00am post: Welcome! To learn more about this project, the researchers and Administrator associated with this blog, please click on the Research Project tab. Also, prior to reading any further, please view the informed consent tab.

In order to comment on this blog you must create a username, as well as list your classification (i.e. undergraduate, graduate, faculty or staff) and your major/department. Commenting is completely voluntary but there will be prizes offered daily to those who do comment.

Now that we got the formalities out of the way, let's get to the fun stuff! Below is a quick questionnaire we hope you fill out to help us understand your feelings towards interprofessional education. What is interprofessional education you may ask? IPE can be defined as 'occasions when two or more professions learn with, from, and about each other aiming to improve collaboration and the quality of care' (CAIPE, 1997; revised by Barr, 2002: 6).

Thank you for your participation! Now, let's chat about the SNAP challenge! What are your biggest concerns related to living off of \$4.20 per week?

4:00pm post: Good afternoon, Winthrop! Since you've had some time to think about the challenge, what do you anticipate to be the hardest change to make in your daily routine?

Also, have you taken the Interprofessional Education Questionnaire yet? If not, Click Here! We would love to get your perspective!

January 21st

8:00am post: Good morning, SNAP Challengers! Today we are asking: have you told your family and friends that you are participating in this challenge? If so, what are their reactions? If not, is there a particular reason you have not shared this challenge with them?

Reminder: Take the Interprofessional Education Questionnaire

Unsure about how to comment? Check out the "How to Post a Comment" tab at the top of the blog!

4:00pm post: Good afternoon, Winthrop! It is officially the last night before the challenge starts! Have you begun to formulate a plan for the week? Why or why not? If so, what does that look like?

Also, don't forget when you are commenting, please include your Classification (Freshman, Sophomore, Junior, Senior, Graduate, Winthrop Faculty/Staff, Community Professional) and your Department/Profession

January 22nd

8:00am post: Good morning, challenge participants! Today is the day! What is the first change you made to your routine and/or diet this morning due to your participation in this challenge? How did this affect you?

Also, don't forget when you are commenting, please include your Classification (Freshman, Sophomore, Junior, Senior, Graduate, Winthrop Faculty/Staff, Community Professional) and your Department/Profession

4:00pm post: You did it! Day one is almost complete, so tell us, how many times did you use a vending machine today? Why or Why not? What choices did you make? What are your thoughts about the options in the vending machines on campus?

Also, don't forget when you are commenting, please include your Classification (Freshman, Sophomore, Junior, Senior, Graduate, Winthrop Faculty/Staff, Community Professional) and your Department/Profession

January 23rd

8:00am post: Good morning, Winthrop! It is day two and the challenge is in full swing! So tell us, what was the largest meal you had yesterday? Is this typical for your diet? If not, why do you think there was a change?

Also, don't forget when you are commenting, please include your Classification (Freshman, Sophomore, Junior, Senior, Graduate, Winthrop Faculty/Staff, Community Professional) and your Department/Profession

4:00pm post: Another day almost complete! Did you find yourself purchasing more unhealthy foods over the past two days due to cost?

Also, don't forget when you are commenting, please include your Classification (Freshman, Sophomore, Junior, Senior, Graduate, Winthrop Faculty/Staff, Community Professional) and your Department/Profession

January 24th

8:00am post: Good morning, challenge participants! It is the start to another great day! So tell us, how has the challenge impacted your diet? Have you noticed any changes in the way you feel?

Also, don't forget when you are commenting, please include your Classification (Freshman, Sophomore, Junior, Senior, Graduate, Winthrop Faculty/Staff, Community Professional) and your Department/Profession

4:00pm post: Hope you are enjoying your weekend, Winthrop! Is anyone going out to a restaurant tonight? Have you had to make any changes to your social schedule due to this challenge? Why or why not? How has this made you feel?

Also, don't forget when you are commenting, please include your Classification (Freshman, Sophomore, Junior, Senior, Graduate, Winthrop Faculty/Staff, Community Professional) and your Department/Profession

January 25th

8:00am post: Good morning, challenge participants! Out of curiosity, how many times per week have you eaten pre-packaged, ready to eat foods? Has this increased or decreased since the beginning of the challenge? Why?

Also, don't forget when you are commenting, please include your Classification (Freshman, Sophomore, Junior, Senior, Graduate, Winthrop Faculty/Staff, Community Professional) and your Department/Profession

4:00pm post: Congratulations! You are halfway there! How are you feeling? What have been the biggest challenges so far? What have you done to address them?

Also, don't forget when you are commenting, please include your Classification (Freshman, Sophomore, Junior, Senior, Graduate, Winthrop Faculty/Staff, Community Professional) and your Department/Profession

January 26th

8:00am post: Good morning, Winthrop SNAP Challenge participants! Something that we were wondering is, do you find that you have increased or decreased your snacking throughout the day? If so, why do you think that there has been a change? If not, why do you think there hasn't been a change?

Also, don't forget when you are commenting, please include your Classification (Freshman, Sophomore, Junior, Senior, Graduate, Winthrop Faculty/Staff, Community Professional) and your Department/Profession

4:00pm post: Hello participants! Tell us, throughout this challenge, have you increased the number of meals you have prepared and eaten at home? Why or why not?

Also, don't forget when you are commenting, please include your Classification (Freshman, Sophomore, Junior, Senior, Graduate, Winthrop Faculty/Staff, Community Professional) and your Department/Profession

January 27th

8:00am post: Good morning, Winthrop! Today we are tackling food selection. So tell us, how is the challenge affecting your fruit and vegetable intake? What changes have you made? Did you have any particular strategies for grocery shopping?

Also, don't forget when you are commenting, please include your Classification (Freshman, Sophomore, Junior, Senior, Graduate, Winthrop Faculty/Staff, Community Professional) and your Department/Profession

4:00pm post: Another day almost done! We discussed food this morning but what about beverages? Over the past 5 days how many beverages have you purchased? Is this number lower than your normal beverage purchases? Why or why not? Has your water intake increased? Why or why not?

Also, don't forget when you are commenting, please include your Classification (Freshman, Sophomore, Junior, Senior, Graduate, Winthrop Faculty/Staff, Community Professional) and your Department/Profession

January 28th

8:00am post: Congratulations! You have made it to the final day of the challenge. We discussed food and beverages yesterday but we forgot about supplements! Silly us! So, how do you feel about SNAP not covering supplements like flax meal or protein powder? Irrelevant? Unfortunate? Has this had an impact on your diet this week?

Also, don't forget when you are commenting, please include your Classification (Freshman, Sophomore, Junior, Senior, Graduate, Winthrop Faculty/Staff, Community Professional) and your Department/Profession

4:00pm post: Although today is the last day of the challenge, there will be two questionnaires posted tomorrow that we hope you will take a minute to participate in. This is completely voluntary, like the comments on this blog have been! To wrap up, tell us would you recommend participating in this challenge to others? Are you more likely/willing to donate food or volunteer at food banks? Why or why not?

Also, don't forget when you are commenting, please include your Classification (Freshman, Sophomore, Junior, Senior, Graduate, Winthrop Faculty/Staff, Community Professional) and your Department/Profession

January 29th

8:00am post: Good morning Winthrop! Before we get to the topic today, we ask that you take a few minutes to fill out two questionnaires. Please consider taking the first questionnaire regarding the blog by clicking [here](#). It is only 5 questions, so it should take less than 2 minutes of your time. Also, please consider taking the Post-Challenge Questionnaire by clicking [here](#)! This questionnaire is aimed at gathering your perspective on the SNAP Challenge regardless of your participation. Thank you for taking the questionnaires! Let's get to the topic today! Now that the challenge is over, what are the top 3 things you have learned throughout this process? Do you think they are important to learn? Have you enjoyed it? Tell us!

4:00pm post: Good afternoon Winthrop! Thank you for your participation in the SNAP challenge and for all of your comments on the blog. You all are AMAZING. This is the final post on the blog (sad!) but the questionnaires will be available all week for you to take. Participating in the questionnaires is voluntary, so we truly appreciate your time and input. Please consider taking the first questionnaire regarding the blog by clicking [here](#). It is only 5 minutes. Also, please consider taking the post-challenge questionnaire by clicking [here](#)! This questionnaire is aimed at gathering your perspective on the SNAP Challenge regardless of your participation.

To wrap up, tell us would you recommend participating in this challenge to others? Was it a worthwhile exercise? Do you think this challenge should be continued at Winthrop annually? Why or why not?

Appendix H. Blog Etiquette

http://blogs.archives.gov/transformingclassification/?page_id=81

To strengthen the quality of discussion we ask that you follow the following Blog Etiquette:

- Always ask yourself before you post:
 - Is this advancing the conversation?
 - Does it add new relevant information?
 - Does it raise a concern with a proposal?
 - Does it suggest a way to improve a proposal?
 - Does it express an opinion on the strength or weakness of the proposal?
 - Does it raise a new way of solving the problem in the topic of the post?
 - Does this comment engage civilly with other commenters?
- Please use the same username for all your comments.
 - You can comment without using your real name, but be consistent with your username and do not pretend to be someone other than yourself.
 - This will strengthen the dialog.
 - Never use two usernames to have a conversation with yourself or to applaud your own comments.
- Please use the subject line of your comment to indicate the item you are commenting on. If you see an existing thread on a subject, please post your comment in that thread rather than create a new thread. This will allow all conversations on that subject to occur in one place, thus making the conversation easier to follow. If you are

responding to a specific comment, please use the comment link under that comment so that your response will be threaded to the comment you are responding to.

- If you use an acronym, please spell out what it stands for the first time.
- This is an unclassified blog.

Appendix I. Coding Instructions

Dear Research Assistants,

First I would like to thank you for taking the time to help code the data for my research project. I know your time is valuable and I appreciate all of your efforts.

On the following page is a table explaining the coding. This coding scheme is taken from the work of Chang Y. J. & Chang Y.S., (2014).

You will be looking for three things in each comment: Reflection (is the commenter responding to the original blog post? If so, does the commenter provide substantial reflection?), Propositional stance (does the commenter agree with the original blog post? Mixed? Or disagree?), and Affective Tone (Is the comment negative? Neutral? Or positive?)

Each blog comment has a unique number assigned to it. Follow the row across to enter in your assessment of the blog comment with the correlating blog question. Please use the following steps for each of the blog comments in the attached excel spreadsheet:

1. Read the blog question
2. Read the Comment response to that blog question
3. Assign a number following the Coding table below assessing the Reflection, Propositional Stance, and Affective Tone of that comment (0,1,2)

If you have any questions, please do not hesitate to call, text or email me; (540) 525-0819, RobbK2@winthrop.edu

Thank you again for your time and help.

Kelley Robb

Reference: Chang Y. J. & Chang Y.S., (2014). Assessing peer support and usability of blogging in hybrid learning environments, *Interactive Learning Environments*, 22:1, 3-17, DOI: 10.1080/10494820.2011.619889

Coding the Data

Dimension	Code	Interpretation	Evidence
Reflection	0	Context-free	Comments made out of the context of the original entry
	1	Non-Reflective	Comments made without demonstrating perceivable reflection on the original entry
	2	Reflective	Comments made with substantial reflection
Propositional Stance	0	Disagree	Comments disagreeing with the original points
	1	Mixed	Comments showing agreements on some points of the original entry but disagreeing with others
	2	Agree	Comments in agreement with the stance of the original entry
Affective Tone	0	Negative	Comments are hostile, destructive, etc
	1	Even	Comments with a neutral affection
	2	Positive	Comments made with a positive tone

Appendix J. IRB Approval

IRB PROTOCOL #: TITLE OF PROJECT: RESEARCHER OF RECORD: CO-RESEARCHERS:
 FACULTY ADVISOR:
 EXEMPTION DATE: EXEMPTION CATEGORY:

IRB15057

An Evaluation of Blogs as an Effective Tool for Interprofessional Education

Kelley Robb, Graduate Student Researcher

Hannah Anderson, Kate Bennett, Rebecca Brangan, Kelly Brooks, Briana Cates, Lauren Cobb, Shelby Cook, Teresa Farina, Miranda Gartman, Linsey Jenkins, Rachael Mitchum, Rhya Pachin, David Stoner, Susan Tyler Wallace, Alexis Wolfgang, Raven Wright
 Simone Camel, Ph.D.

November 21, 2014

14(b) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior unless (a) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; or (b) any disclosure of the human subjects' responses outside the research could reasonably place the subject at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability or reputation. [45CFR46(b)(2)]

Research involving children (subjects who have not attained the age of 18 years) is not exempt unless the research involves only the observation of public behavior and the researchers do not participate or impact the activities being observed. [45CFR46.401(b)]

The Request for Review of Research Involving Human Subjects identified above has been reviewed by the Winthrop University Institutional Review Board (IRB) and has been determined to be exempt from IRB review. You may begin your research on or after the Exemption date show above.

A Request for Modification of Previously Approved or Exempt Protocol must be completed by the researcher and submitted to the IRB for review for any proposed changes or modifications to the protocol. IRB approval must be received prior to amended changes or modifications being implemented by the researcher. These changes may include a change in a survey instrument, the addition or deletion of a research site, a change in personnel, a change in methodology or a change in the Researcher of Record. Use the form Adverse Event Report to report any negative consequences that occur as a result of participation in a research project. . An "adverse event" or "adverse experience" is an undesirable and unintended, though not necessarily unanticipated, injury or physical or emotional consequence to a human subject. "Unanticipated Problems" may or may not include specific events experienced by individual subjects, but are developments within the research activity that suggest a potential for increased risks to subjects or others.

Aaron Hartel, Ph.D., Chair

Winthrop University Institutional Review Board 803-323-4942

hartela@winthrop.edu

Teresa Justice, Director Sponsored Programs and Research Winthrop University 803-323-2460 justicet@winthrop.edu