Reflection Promotes Transformation in a Service Learning Course

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Abstract

The purpose of this paper is to outline the delivery of a Master's level, Community/Public Health Nursing service learning course that spanned a two semester academic year. The instructor of record created a reflection binder with selected assignments to facilitate the transformative learning process that occurred during the course. Analyses of the reflection assignments demonstrated that isolated incidences of transformative learning occurred. One exemplar of the transformative learning process is presented.

Introduction

For years, scientific research and public health campaigns focused on individual lifestyle as the primary etiology of poor health (Freudenberg, 2007, p. 1). Personal choice and behavior such as smoking, sedentary lifestyle, unhealthy eating, alcohol consumption, and use of illegal substances were funded public health interventions and were the focus of mass media communication that spanned billboards, radio advertisements, and healthy living websites. However, population health in the United States continued to decline, and as reported by Robert Wood Johnson Foundation Commission to Build a Healthier America (2009, p. 9) for the first time, "Americans are raising children that were more likely to live sicker and shorter lives than their parents." This fact resulted in a paradigm shift. Instead of "blam[ing] individuals at highest risk for ill health, even when their choices have been constrained by public policies and corporate practices" (Freudenberg, 2007, p. 1), public health professionals emphasized that social factors within an individual's environment were just as influential on individual health and health related behaviors/choices; thus, emerged the need to understand the social determinants of health (Commission on the Social Determinants of Health [CSDH], 2008, p. 1; Brennan-Ramirez, Baker, & Metzler, 2008, p. 10; Robert Wood Johnson Foundation, 2008, pp. 16-17).

The World Health Organization (2015) defined social determinants of health as, "the conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks." Examples of social determinants include access to healthy food, adequate housing, good education, safe neighborhoods, and freedom from racism and other forms of discrimination (Brennan-Ramirez, Baker, & Metzler, 2008, p. 10). According to Marmot and Allen (2014) these factors are just as influential on individual health as biology and genetics. For example, adjusted statistical models demonstrated that white and black adults (65 years and older) living in mid- and highly- disadvantaged neighborhoods in Alabama had a 60%-80% greater odds of having hypertension (Buys, et. al., 2015, pp. 1183-1185). For those older adults who lived in highly-disadvantaged neighborhoods, 40% were less likely to have controlled hypertension (Buys, et. al., 2015). Disadvantaged neighborhoods were defined by the level of poverty and presence of a female head of household which are two major social determinants of health. Additionally, participants who reported limiting their outdoor exercise due to fear of being robbed or attacked were more likely to be from mid- to highly-disadvantaged neighborhoods. The possible cause and effect relationship between not exercising and higher odds of having hypertension cannot be overlooked for those individuals living in progressively more disadvantaged neighborhoods.

The necessary focus on social determinants of health is apparent in the public health work conducted at the national level. *HealthyPeople* is a national initiative focused on improving the overall health of the nation. By identifying goals in various health indicators every ten years, the initiative strives to

document national trends towards improving health. The current initiative, *HealthyPeople 2020*, is founded on the roots of examining determinants of health, including those that are biological, physical, and social (U.S Department of Health and Human Services, n.d.). The four overarching goals of *HealthyPeople2020* revolve around promoting optimal health in Americans. Nurse play a vital role in reaching these goals because of the focus on health promotion and creating social and physical environments that support healthy living lifestyles. When educating nurses about *HealthyPeople2020*, it is common to have students conduct a community assessment. By structuring this community assessment using the social determinants as a data collection framework, students are able to distinguish health patterns and trends that certain social groups exhibit, and direct health interventions at the appropriate social condition to improve health outcomes. The assignment also challenges the student to acknowledge barriers to health that are social in nature. Social justice concepts such as discrimination, racism, and access to healthcare often emerge as major contributors to health related behavior and outcomes. The community assessment was the starting point of this transformative journey.

Purpose

The purpose of this paper is to outline the delivery of a Master's level, Community/Public Health Nursing service learning course that spanned a two semester academic year, and consisted of twelve academic credits: six didactic credits and six practicum credits. This course was developed on the foundation of social justice concepts with an anticipated outcome of increased awareness of self within the broader society and greater appreciation of the impact of social factors on individual health. Aggregated quantitative and qualitative data demonstrate the transformative learning that occurred for the students over the academic year.

Background

It is important for nurses to acknowledge the relationship between various social factors and health in the individual and the community. Nursing education that is grounded in social justice concepts (discussed below) with assignments that engage students in the reality of the community environment are likely to expose students to a way of living that is much different than their own.

Social Justice

Bell (2007, pp. 1-2) wrote about social justice as being a vision where the allocation of resources is equitable among all members of a society and members of that society recognize their responsibility to self, their society, and the world in which they live. A critical review of the cultural and social self, with acknowledgement of how that self-identity interacts with the greater social structure provides a rich learning environment for the student to explore social justice constructs.

Nursing service provided in the community, with a social justice approach, "redirects the focus of service learning from charity to social change and connects awareness to action" (Bowen, 2014, p. 53). Students are guided to appreciate their service as more than just providing the community with help. Instead, they are aware that their services are directly related to the social culture of the community and may potentially enact social change. This is the target of transformation.

Transformational Learning

Adults develop assumptions, beliefs and values of the world that guide interpretation and action. Family, culture, society, and the vast array of media messages regularly influence the development and revision of individually held assumptions. Transformative learning is a process in which the adult becomes,

"critically aware of how and why our presuppositions have come to constrain the way we perceive, understand, and feel about our world; of reforming these assumptions to permit a more inclusive, discriminating, permeable, and integrative perspectives; and of making decisions or otherwise acting upon these new understandings" (Mezirow & Associates, 1990, p. 14).

An instructor cannot guarantee that transformative learning will occur in a given course. As such, one distinct method for teaching towards transformation does not exist. The responsibility of the instructor is to provide an environment where transformation can occur. According to Mezirow (1997, p. 10) this learning environment needs to provide a setting where events and situations challenge individual assumptions, there is a safe means for articulating individual assumption, there is an opportunity for critical discourse and continued reflection with an exchange of alternative views and perspectives, and there is plausible action based on the new perspective(s).

Service Learning and Transformation

Service learning is one pedagogical method used to facilitate transformative learning. Service learning is a teaching and learning strategy that integrates meaningful service in a community with instruction and reflection to enrich that learning experience, teach civic responsibility, and strengthen community. According to Eyler and Giles (1999, pp. 1-22), there are four components to a successful service learning experience: (1) personal and interpersonal development, (2) application of the knowledge learned in class, (3) perspective transformation, and (4) developed sense of citizenship.

When students are placed in a societal "context that challenges their prejudices, prior experience and assumptions about the world" (p. 17) they learn about themselves, and their relationship to the greater group (community, society, and world). Transformation is aimed at engaging the individual beyond just the status quo of daily living. The engaged citizen is one who challenges the social norm by recognizing his/her role in changing the norm. This is extremely important for norms that have deep roots in social justice concepts. Eyler (2002) attributes service learning to the development of an engaged citizen by achieving the following:

1. Student interest is engaged by involvement in authentic service to the community,
2. Students develop positive attitudes towards community engagement,
3. Students develop a sense of personal efficacy and commitment,
4. Students develop deeper understanding of social issues (or other subject matter),
5. Students develop lifelong learning and problem solving skills,
6. Students develop skills for community action and involvement, and
7. Students develop post formal reasoning abilities necessary to deal with complex "ill structured" social problems (p. 519).

As an engaged citizen, the status quo of inequities, especially those related to health, are examined, confronted, and changed for benefit at an individual and societal level. The courses described below aimed to engage six female Master's students in a public university community/public health nursing program. This project received approval from the Institutional Review Board at the academic institution.

The Service Learning Course

The Master's in Community/Public Health track requires the student to enroll in a year-long didactic course and co-requisite practicum focused on developing knowledge and skills in community assessment, planning, intervention, and evaluation. Each course is three credits: six credits in the fall and six credits in the spring. Three practicum credits equaled 168 practicum hours, for a year-long total of

336 hours. The principles of service learning were applied to the practicum course to facilitate the link between classroom content and the community based service work.

Implementation

Each student selected a community to perform the practicum hours. This selection was generally based on interest and was facilitated by the connections already existing between the instructor and a community agency contact. Selected communities covered a large geographical area and a diverse range of age, gender, racial, and ethnic demographics. The student group engaged with children and families across various housing and educational situations and addressed issues related to asthma, diabetes self-management, anxiety and depression, sleep hygiene, and physical restraint management.

In the fall semester practicum, the students focused on community engagement. The intent of engagement was to perform a comprehensive community assessment that collected social determinant data and identified strengths and resources of the community. Data collection included epidemiological data and qualitative data from key informant interviews and focus groups. These data, along with recommendations from community members, informed the planning of a health-related intervention in the community. In the spring semester, the 168 hours of service focused on implementing and evaluating the health program that was planned during the fall.

Six graduate students were enrolled in the fall course, and five of the six students continued into the spring course. The remaining student applied for a leave of absence. Assignments for the spring built upon the work conducted in the fall and the culminating project consisted of a poster presentation at the College of Nursing Annual Scholarship Day, a written evaluation paper, and a tangible giveback to the target community. All five students prepared a three ring binder with a descriptive outline of the program, print resources or Internet links to electronic resources, a brief evaluation of the implemented program, and recommendations for the next program implementation.

Student Reflection

Service learning courses rely on the student reflection to help to link the course content to the service activities. Reflection is also a key tenet of Transformative Learning Theory. Reflection is the process by which individuals develop the capacity to develop cognitively and think critically (Eyler, 2002, pp. 527-528). The course instructor strategically embedded reflection exercises throughout the semester to meet both of these goals. During the fall semester, critical reflection was used as a mechanism to help students explore and understand their assumptions of social concepts and develop the comfort and competence to question their assumptions and how those assumptions directed their societal view and action. When assumptions are acknowledged and challenged, different perspectives are recognized as viable ways to solve problems. This process is important for Community/Public Health nurses who work with a variety of social groups that may be unfamiliar to their own.

Student reflection is not a one-time occurrence and should not only be conducted at the end of the service learning experience. According to Eyler, Giles, and Schmiede (1996) there are four C's to facilitate effective service learning reflection: continuous reflection, connected reflection, challenging reflection and contextualized reflection. Continuous reflection is an ongoing reflection that begins before the initiation of the service learning and continues through the completion. Reflection prior to the service assists in preparing students for placement in the community. The creation of a learning contract where students identify learning goals and the evidence that will be needed to demonstrate their achievement is a common mechanism of pre-service reflection (Eyler, 2002, pp. 524-526). During service, reflection addresses the direct experience on site and focuses on problem solving. Post-service reflection includes

an evaluation of the service experience, and begins to transform newly gained experiential knowledge into existing knowledge. Connected reflection is a purposeful method to build the bridges between learning content, personal reflections, and first hand experiences. Challenging reflection focuses on looking at old questions with varying perspectives to answer and develop new questions that promote learning. Contextualized reflection provides a meaningful interaction between the student, the activity, and the setting, and may involve the community members as a mechanism to explicate this meaning. Contextualized reflection examines critical incidents that occur in the life of the student during the service learning experience (either in society or specifically affecting the student). These occurrences were examined for their influence on the service learning experience and were considered transformational if the student demonstrated that their perspective had some meaningful change.

Reflecting on the social structure of the environment can be uncomfortable and anxiety provoking forthe student. To prepare the group for the intimate reflection component of the course, the following statement was included in the syllabus and reiterated at the beginning of many classes. "This course will be most successful when all participants commit to develop a learning community in which the beliefs of all may be discussed in an open, civil, and respectful environment. Everyone will be expected to consider multiple perspectives, engage in critical reflection, and take intellectual risks built on one's confidence in the content. Class activities will focus on critical analysis of (1) course readings, (2) research findings, and (3) class discussion. Your personal experiences are important but require critical reflection and analysis. Hence, the ability to interact with the material in a personal and self-reflective manner is essential."

Fall Semester Reflection Exercises

In the fall, students completed six r assignments, with various levels of required reflection, to raise their self-awareness of cultural and social self-identity. See Table 1for a brief description of each assignment. The instructor included these assignments to facilitate the understanding of self and the self within the greater social environment. Tools with an asterisk (*) are found in the appendix of Adams, Bell, and Griffin (2007). There were minor adaptations made to the process questions to make them applicable to the course content and the role for which students were being educated. Tools with two asterisks (**) are located in the Faculty Toolkit for Service Learning in Higher Education (Seifer & Connors, 2007, pp. 32-41, 49-57).

Table 1

Description of Reflection Assignments to Promote Transformative Learning

Reflection Assignment	Description	Process Questions Directing Reflection
*Social Group Membership Profile and Identity Wheel	The student reflected on belonging to the following social groups: ethnicity, race, sex, gender, sexual orientation, age, class, religion, ability/disability and other. The student determined whether belonging to the group is an advantage or disadvantage in society. Advantaged status was defined as having access to resources, social power, and privilege within society. Disadvantaged status was equated to experiencing oppression, being targeted and/or denied the resources, social power, and privileges of the other members of society. The student created an identity wheel. The wheel was segmented into "pie pieces" which represented the social groups that the student identified.	1. Which of your social group memberships were easy to identify? 2. Which of your social group memberships were most difficult to identify? 3. What questions are raised for you about your social group membership? 4. Which of your social group status were easy to identify? 5. Which of your social group status were most difficult to identify? 6. What questions are raised for you about your social group status? 7. How does the examination of your own social group membership influence the way you approach community health nursing?
*Privileges and Disadvantages Inventory	Thirty-five questions were answered using a true-false dichotomy. Questions focused on many privileges awarded to certain social groups. For example, students are asked to answer whether they were teased, prevented from getting a job, accused of lying, stealing, or cheating, or had been a victim of violence based on race, ethnicity, religion, sexual orientation, or gender expression.	1. What are your reactions to the process of doing the activity? 2. What are your reactions to identifying some of the privileges and disadvantages associated with some of your social group memberships? 3. What statements were particularly striking to you? Why? 4. What questions about privilege and disadvantage are raised for you? 5. How was your experience of privilege and disadvantage the same or different from members in the community that you are working with?

*Class Background Inventory	Ten questions directed the student to reflect on his/her class background by acknowledging the family source of income, housing environment, educational preparation, and priority values. Students wrote about how these concepts influenced attitude, behavior, and feelings about community and community program planning.	None. The exercise already had open ended questions.
**Worksheet Guidelines for Writing a Partnership Agreement Memo	The students completed this form prior to identifying their service learning goals. Students were encouraged to complete this form with their community preceptor because it asked about necessary resources, key stakeholders, predicted challenges and other key concepts important in academic-community partnerships.	None. The exercise already had open ended questions.
**Partnership Assessment Tool	This tool is a resource of 56 questions used to measure the success of the academic-community partnership. Questions rated the strength of various qualities in the academic-community work. Scores of $1 - 4$: $1 =$ low and $4 =$ high.	No additional questions were asked because the instructor worried that 56 questions may be burdensome and she did not want to increase. Students were instructed to elaborate on scores with comments as deemed necessary.
**Student Self-assessment	The student self-assessment used the course requirements and goals to assist the student to reflect on the extent to which they met them. The student assigned themselves a course grade with rationale.	No additional questions were asked because the instructor worried that 23 questions may be burdensome and she did not want to increase. Students were instructed to elaborate on scores with comments as deemed necessary.

In addition to these assignments, each student wrote four journals describing a specific practicum experience. The instructions in Table 2 (Seifer & Connors, 2007, pp. 88-89) were provided to the student in the course syllabus. The instructor focused on section four an indicator of transformational learning occurring in each student.

Table 2

Directions for Journal Writing

Please clearly divide each entry into the following categories.
      1. Date and hours worked
      2. Objective/Description of your experiences
What happened? Write a factual account of the behaviors you observed that does not include your opinion. Write at least 100 words.
      3. Interpretation/Explanation
Now try to understand the behaviors you described above in #2. Use principles and concepts from the course reading material and lectures in making your interpretations.
      4. Personal Opinions/Feelings and Learning
Thoughts/opinions. Interpret what you saw and heard today. What does it mean to you? Use emotion words (i.e., happy, surprised, frustrated) to describe your feelings. What knowledge and/or skills did you acquire today? What did you learn about yourself? What did you learn about others around you?

Spring Reflection Assignments

According to Eyler (2002, p. 522), a high level of "reflective judgment can assist individuals to identify the ill-structured nature of social problems, frame them, resolve them, and understand the need to continually readdress the issue as conditions change and new information is developed." After reading through the fall semester reflection binder, the instructor felt that the journal entries were not demonstrating the transformative learning that was seen and heard during classroom discussion. Collectively, the students were applying the self and the self within the society into their practicum experiences. Therefore, the instructor assigned more structured reflection questions in the spring semester course. Each reflection had a due date. The instructor read and provided a written comment on the submitted reflection. The student was encouraged to address any comments made by the instructor before submitting the reflect ion assignment in the reflection binder at the end of the course. Topics of reflection included the following:

- Conflict within the partnership.
- Minimally involved stakeholders, or stakeholders who dropped out of the partnership.
- Community members who made strong impression, either positive or negative, and why.
- What was satisfying about performing the service?
- How has the service affected your worldview and your professional relationships?
- How has your understanding of the community changed?

The student continued to write practicum journals per Table 2.

Results

At the end of semester one, students completed a service learning survey which assessed the impact of the service learning experience. After completing the fall semester, six students responded to the service learning survey. Students were asked to rate their ability to engage in multiple community engagement skills and civic engagement skills. Two sets of scores were calculated, the student's self-reported skill prior to the service learning course, and the student's self-reported skill post service learning course. A paired t-test found significant differences ($p < 0.05$) between pre-course mean scores and post-course mean scores.

Table 3

Significant Findings (p < 0.05) from Fall Service Learning Survey

Community Engagement Skills	Pre-Course Mean Skill Score	Post-Course Mean Skill Score
• Identify needs and resources of the community	2.50	4.33
• Apply knowledge and skills gained to real problems/opportunities in my community	3.00	4.50
• Make connections between learning and issues/needs of the community	3.17	4.67
• Articulate the value of engagement to other members of the community	2.67	4.50
	3.33	4.33
	3.0	4.17
Civic Engagement Skills		
• Organize other students to take action on a community problem	2.17	3.50
• Create a plan to address the issue	2.50	4.17
• Get people to care about the problem	2.67	4.00
• Organize and run a meeting	2.67	3.50
• Find and examine research related to the issue	3.50	4.33
	3.00	4.33

At the completion of the spring service learning course, the students completed the same survey. The instructor directed the students to answer pre-course skill using a self-reported rating from the fall, prior to enrolling the service learning course and post-course skill ratings for when the academic year was over. As depicted in Table 4, the group mean had a significantly higher score in many items correlated to community engagement and civic engagement skills.

Table 4

Significant Findings (p < 0.05) from Spring Service Learning Survey

Item	N	Pre-mean	Post-mean	99% CI	t	Df	*p*-value (2tail)
Community Engagement							
Identify needs and resources of the community	5	3.0	4.4	-.27223	-5.715	4	.005
Apply knowledge and skills gained to real problems/opportunities in my community	5	3.0	4.4	-.27223	-5.715	4	.005
Make connections between learning and issues/needs of the community	5	3.0	4.6	-.47223	-6.532	4	.003
Articulate the value of engagement to other members of the community	5	3.4	4.6	.52269	-3.207	4	.033
Evaluate and integrate information from multiple sources	5	2.8	4.4	-.47223	-6.532	4	.003

Civic Engagement							
Organize other students to take action on a community problem	5	2.2	3.2	.45594	-3.162	4	.034
Create a plan to address the issue	5	2.6	4.2	-.47223	-6.532	4	.003
Get people to care about the problem	5	2.6	3.8	-.27918	-6.000	4	.004
Find and examine research related to the issue	5	3.2	4.4	.52669	-3.207	4	.033
Apply what I learned in my service learning class	5	2.8	4.4	-.47223	-6.532	4	.003

Quantitative results are important in determining the impact of an intervention. However, the qualitative information gathered from the student's practicum journals and reflection assignments provides important data to support the transformational learning process that occurred. Table 5 contains selected student quotes that are cross walked with the type of reflection (the four C's) and the assignment that the quote was taken.

Table 5

Reflection Statements from Students (Fall)

Assignment	4-C Component	Selected Student Reflection
Worksheet Guidelines for Writing Partnership Agreement Memo	Connected	"I am a little worried about being able to produce tangible results in the span of one academic year. Still, I am more concerned with doing a project that is worthwhile to myself, my colleagues, my students and their families."
Social Group Membership Profile	Challenging	"The most memorable piece to this event occurred at the end of the day when we were cleaning up. We obviously had too much food, so [name withheld] opened the doors to a number of homeless people that were walking around outside. They offered them warmth and food. We made up some [food] bags to take with them for their friends and family. One of the women talked to me about how she became homeless and her daughter of six years old would be so happy to eat so much tonight. One older homeless gentleman gave up some of his portions to another man who had two children to feed. It is unbelievable how your life can turn on a dime like these unfortunate souls. I walked away with a mix of emotions. I was impressed by the kindness and professionalism I saw here today and I was so much more appreciative of what I have."
Identity Wheel	Challenging	"I never felt my class background played any part in my feelings, attitudes, etc. Now as an adult, I can of course see how my ability to have hope of a good education, expectations to be treated with respect do come from my background."
Privilege and Disadvantage Inventory	Challenging	"This topic [I will never need to teach children in my life about racism for their survival] has not been on my list of big talks to have with my small children and it occurs to me now that many other families have had to have this discussion with children younger than mine."

Class Background Inventory	Challenging	"The statement about feeling safe if police were present was striking to me. I had to think for a few moments about why it wouldn't be. Then I was thinking about the events of this week at my work. One of my students, a 20 year old, black man ran into an office this week. The student is tall and fit and, I guess, could look intimidating to someone who doesn't know him. He has very little meaningful language and very slow processing time with verbal curs. Needless to say, the woman who was in the office was extremely upset and reported the incident to the principal in the building. Had one of our white students, female students wandered into that office, there probably would not have been an issue. Little did that person in the office know that the student she met is never aggressive unless provoked. Yet other students who "look" harmless can be very violent for reasons that you'd never guess…yes these are real life examples."
Partnership Assessment Tool	Contextual	"I enjoyed speaking with [name withheld]; however I was disappointed in the lack of detail that she could provide. I did not get the sense that improving sleep in college students was a passion of hers."
		"I just wanted you to know that this AM I have sent my 3rd email to [name withheld] at [location withheld] asking for dates and times I can start my project and asking for the ability to see the materials so I can build that curriculum. The previous 2 have gone unanswered so I hope she answers this one!"
Student Self-assessment	Contextual	"I initially entered this project with some hesitancy due to my lack of experience with juvenile diabetes, but I learned that I knew much more than I thought."

The reflection journals from the spring semester provided much more in depth self-analysis and application of course concepts to the service work. This was achieved by the instructor providing more structured reflective questions to the students. Excerpts from reflection journals are presented in Table 6.

Table 6

Reflection Statements from Students (Spring)

Connected	"All of the women came with a child, most babies which I got to take care holding while the women did their art. I did find it a little difficult to babysit while running group, but on the other hand, I realize this is the reality of doing community nursing. " "I think the longer you work somewhere or engage with the people somewhere the more comfortable you become and more like an insider you feel." "I am definitely learning that no matter what you have planned, 'rolling with the punches' is necessary, what YOU want to do may not be what THEY want to do and ultimately the group is about THEM.

Challenging	"…in this class, there was a student who stood out to me who seemed to have sleep issues from his vague comments, mannerisms and actions. He made me wonder: how does a nurse make the transition from the tailored individual plan to trying to help a group as a whole? As a home care nurse, I go into homes, and I work with an individual and see success or failure. With this community geared program, I received feedback from the students, but I do not know if there was individual success." "I am surprised by the extent of the services offered the residents of the shelter…It also surprised me how many women actually preferred living at the motel instead. They agreed that the shelter was more supportive and the benefit of the kitchen as well as reducing isolation, but appreciated the privacy of having your own space without really having to answer to anyone. I think of these people when I am driving down route 6 in [town] and seeing people walking to the nearby Walmart or Target to get their everyday needs met but due to the snow they have to actually walk on Route 6 with their children in tow. I've seen them push their strollers out onto the busy street in frigid, wet, snowy weather and I can't imagine that it is better than the shelter."	
Contextual	"I made several attempts to engage in community activities with [name withheld] in order to gain trust and slowly build a relationship with the community but that was not always successful sue to schedule conflicts or poor weather." "[name withheld] is also wanting me to do other groups such as personal hygiene and teaching use of feminine hygiene products. Although the role of an advanced degree community nurse certainly includes teaching on all levels I'm feeling a little overwhelmed with multiple curricul[a] since I, of course, want to do my best at each one."	
	"The participants were asked to decorate the outside of as they present themselves to the outside world and the inside of the box as they truly feel on the inside…Another woman surprised me with her box. She explained that her box was backwards. She stated she "had" to project herself as angry and hard so the outside of her box reflected that, the inside of the box was decorated with family and love because she felt she had to not allow others to see that part of her that was happy. I had fully expected all of the participants to create an outer box of happy, put together individual and the inside to be 'chaos.'"	

Table 7 represents the pre- during- and post- continuous reflections that emerged from the practicum journals that the students passed in during the academic year. These examples are presented separately to exhibit the seven month journey of the students in their selected communities.

Table 7

Continuous Reflection Statements

Practicum Journals	Continuous	Pre- "Spending time going door-to-door provided me the opportunity for engagement with community members. Once community members saw me walking door-to-door on several occasions they wanted to know who I was and shortly realized that I was there to help the community."

	During- "Although I am sure most of the families in the shelter have heartbreaking stories of loss and stress, I found, surprising that I was not feeling sad for them. I thought I would feel more pity. I was happy, smiling, the way people do when they watch children having fun. These children were no different than the kids my kids play with at the playground or in their schools. For this reason I am glad there is no real in-depth interaction with the families, I will not be becoming familiar with the shelter's inner workings and the stories of the difficulties and traumatic histories of these children. I want to be able to enjoy them having fun and hope that it helped them relax and forget for even just an hour and not give them pity, they get enough of that." During- "I observed a large number of students using cell phones while the athletic administrator spoke. It became more apparent that this is the younger students' culture. Cell phone use will be a competition in educational sessions. So, can cell phone use be involved in the [my education session, through poll applications?" "Miscommunication and lack of communication seem to be dominating my semester, as I am sure it does in the real world." Post- "I felt uneasy giving the program away. This feeling was unexpected…This group already had a full plate; are they going to put the effort into maintaining [program name]." "I have come to understand that although the project is very important to me, others may not consider it a priority." "Once it was over, I truly felt that it was fun, and I was disappointed that I did not have more presentations scheduled…My original plan did not work, and although I did not like it, I still had fun."

Transformative Learning Exemplar

Of the five students that completed the academic year service learning course, there was one student who clearly demonstrated the process of transformative learning as evidenced through her reflection journals. Her end of the year reflection is depicted in Table 8, segmented by the stages of the transformation process. Although her, "stereotypes and jaded experience" of the homeless population may not have been altered, the willingness to acknowledge, examine, and act upon these feelings are important steps in the transformative process.

Table 8

Transformation Exemplar

Transformation	Student Reflection Statement
Knowing self and acknowledging biases and assumptions about the social world	"I hoped my worldview would be more [a]ffected working with this population in this environment. Working on a psychiatric unit for 12 years I have dealt with my share of homeless individuals, made homeless by many different circumstances, some poor decisions, some a series of bad luck. Although I like to believe that I choose to see the good in people I have found this population in the hospital to be a bit entitled."
Knowing self and acknowledging biases and assumptions about the social world	Continued: "I hoped that I would find that in the real world, in the shelter, I would find that these were hard working people, struggling to make a transition, to make their lives and the lives of their children better. Many of the people I have interacted with at the shelter have struggled with being at the shelter. This week in particular however, I have seen that entitled attitude I am so used to. One woman who is 14 weeks pregnant was talking about how she thought being pregnant would get her to the front of the line for an apartment and was quite surprised when it didn't. Another was very upset when she fell, due to pain, and the shelter worker commented on how messy her room was. It was, unfortunately, not surprising to hear that she was feeling better only because another resident (the pregnant one) gave her an oxycontin."
Reflection	"Reflecting on my worldview, which consists of stereotypes and jaded experience, reminds me that our system for dealing with the homeless population leaves much to be desired and hopefully we can learn from other countries who don't seem to have the same issues we do in this country."
Subtle change in perspective with a proposed plausible action to act on the social environment of homelessness and mental health illness	"I'm very glad to have done this community work, it has validated, for me, the need for community mental health options for populations which do not consider their mental health to be a priority. Although many have trauma, stress, and depression they have other priorities like joblessness and housing issues that take priority. When I complete my degree I hope having this type of experience will make me more marketable in an outpatient psychiatric setting, dealing with more of the community population and their untreated mental health issues."
Actual action to promote change	"I am able to subtly inject my values mostly by modeling. Much the way I have seen the other shelter workers doing. We treat the children well and with respect, I insist that in my class participants treat each other with respect also. I try to show them that I am working hard to get ahead in life. I also show them that I am there, every week (weather withstanding) in order to have a good class for them. I do what I say I'm going to do and follow through with requests.

Discussion

In this Master's level service learning course, reflection assignments were completed by the students and analyzed by the instructor for demonstration of a transformative learning process. The use of a reflection binder at the end of each semester provided the instructor with ample data to analyze. In general, themes from the data were related to the more popular concepts of community engaged work, such as the importance of community engagement, collaboration with community partners, flexibility on the part of the planner, and the need for clear and concise communication. The student group struggled in the fall to demonstrate the higher-level thinking and critical analysis needed to determine if transformative learning had occurred. This improved in the spring semester.

Interpretation

The small sample size of five students requires the reader to interpret quantitative data with caution. However, it is evident that the service learning course had a positive influence on the students' abilities to develop community engagement skills and civic engagement skills. Based on the qualitative data extracted from the reflection binder assignments, it appears that the selection of assignments and reflection questions were helpful to the students to meet the components of service learning, and when they were provided more directed reflection, isolated student statements alluded to a plausible transformation in thinking. For example, one student wrote, "I was extremely moved by the speaker's honesty about his experience, and I wondered if the students would be too…I feel I understand that addiction is a disease; however, I still feel frustrated at times with individuals who are addicts. This session reminded me that addicts are people, and they are everywhere, including the campus of [name of institution withheld]."

Recommendations

Both service learning and transformative learning embed rigorous and quality reflection as part of the process. Therefore, it is reasonable to assess for both service learning outcomes and evidence of transformative learning in the same course. However, one of the most challenging tasks for the instructor is to provide appropriate and useful reflection assignments as part of the course offering. In this first trial run, the instructor quickly realized that the student struggled to demonstrate, through their writing, the high level thinking associated with transformative learning. The instructor believes that having the more structured reflective questions in the spring semester provided more direction for the student to frame their thinking, and consequently their writing. The instructor will include more structured reflection questioning in the fall assignments, especially for the first few assignments since the student may have never been exposed to such type of in-depth critical analysis of self in relation to the world. These tenets have been reported by others in the service learning literature (Eyler & Giles, 1999; Ash, Clayton, & Atkinson, 2005).

Transformative learning is not complete without the individuals acting on their revised assumptions. In the practicum course, the students were paired with a community based preceptor and the instructor of record communicated with the preceptor via phone and email and had one scheduled on-site visit in the spring. Therefore, it is plausible that the students acted on their revised perspectives without the knowledge of the instructor and without documenting that specific incident. Consequently, some evidence of service learning induced transformation was not available for analysis. In the future, the instructor will involve the community based preceptor in this active analysis of transformation by having each preceptor understand the process of transformation and employ methods of data collection. In particular, preceptor reported conversations between the student and preceptor and on-site observation will be added as evidence for analysis of learning.

Conclusion

Several years ago, when this instructor read the editorial From Lifestyle to Social Determinants: New Directions for Community Health Promotion Research and Practice, it became apparent that one avenue for social change in health belonged in academia. As outlined by Freudenberg (2007), universities had four mechanisms to promote social change: "(1) academics can help reframe our view of lifestyle, (2) analyze the social processes that create poor health in order to identify new intervention opportunities, (3) engage more constituencies in health promotion, and (4) develop health professionals with new skills (pp. 1-2)." In this Master's course in Community/Public Health, the instructor rooted the course in service learning principles with a focus on social justice concepts that would help the students further understand and apply the social determinants of health in the local communities. The use of a reflection binder at the end of the fall semester, and a cumulative reflection binder (all fall and spring assignments) provided the instructor with the opportunity to assess transformative learning in each student.

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