

Incorporation Of Service Learning In Diet And Nutrition Assessment Module

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Abstract. This paper presents the incorporation of service learning in one of the modules in the Diploma in Nutrition, Health and Wellness (DNHW) curriculum: CP7013 Nutrition and Diet Assessment.

Each of the three Year 2 Stage B classes was assigned to conduct nutritional check and nutrition education activity for a specific community. The participants were asked for their feedback towards the end of the activity session. The students were then asked to reflect on this hands-on activity and answer the student feedback form about service learning and this activity.

100% of the students agreed that the activity was a very good learning experience for them and that service learning is a good way of enhancing the teaching and learning experience of DNHW students. Based on the students' feedback, the top three skills that they have learned from this activity are communication skill, enhanced/improved technical skill and time management skill; while the top three modules they think that are related to this activity are Nutrition and Disease, (basic) Nutrition, and Speaking Skills for Wellness Professionals.

Results from the community's feedback showed that in general, they were satisfied with the nutritional check and nutrition education session provided for them. Most of them are willing to undergo the same check to monitor their nutritional status after six months. Generally, they were pleased and gave positive comments and sensible suggestions to the students.

In conclusion, service learning can be considered as an effective tool in teaching and learning CP7013 module, as well as inculcating personal and civic responsibility among DNHW students. It also benefits the community that is being served.

1. Introduction

Service Learning

Service learning was suggested as pedagogy suitable for DNHW. DNHW graduates are qualified to assume responsible positions in the nutrition, health and fitness industry that will promote health and general well being to the population. Service learning is believed to be appropriate as according to American Association of Community Colleges (2013), it combines community service with

classroom instruction, focusing on critical, reflective thinking as well as personal and civic responsibility. Service learning programs involve students in activities that address local needs while developing their academic skills and commitment to their community. According to Kerins (2010), it empowers students in a way that is not possible in an ordinary class. Service learning is for the most part a development of the United States and the extent of its use differs among different countries like UK and Europe. Moreover, service learning is a relatively new concept in Australia, Asia and Africa.

Millennial Student

The Millennial students are also referred to as Generation Y's born after 1982, and are quite a contrast from their Baby Boomer and early Generation X. Defining the characteristics of the Millennial student assists in revealing how they best learn in and out of a classroom [1]. They are the first generation in human history who regards behaviors like tweeting and texting, along with websites like Facebook, YouTube, Google and Wikipedia, not as astonishing innovations of the digital era, but as everyday parts of their social lives and their search for understanding [2]. Monaco and Martin (2007) stated that the defining characteristics of millennial students are special, sheltered, team oriented, confident, pressured, achieving, and conventional (*with some classroom applications for these characteristics – provision of feedback, clear instructions and expectations of assignment, opportunities for in and out of class social learning activities, interactive learning, opportunities for in and out of class social learning, link content to “real life applications, utilize problem solving by integrating sociological situations from a variety of cultures*).

The current DNHW students indeed exhibited these characteristics and most of the classroom applications indicated in Table 1 are being practiced in the conduct of DNHW modules.

As part of the graded component (course assignment) in CP7013 Diet and Nutrition Assessment, each of the three Year 2 DNHW classes was assigned to plan and conduct one nutritional check and nutrition education activity/session (with the supervision of lecturers) for a specific community (SP Library staff, Ulu Pandan elderly, Redhill residents) within December 2012 to January 2013. This activity integrated the classroom applications mentioned above.

The students conducted the activity as scheduled and gathered feedback from the participants.

Lecturers observed and assisted the students in the actual conduct of the activities. The hands-on nutritional assessment and written reflection were graded accordingly. A debrief was given to the classes after the sessions. The students were asked to submit a written reflection (Appendix B). A feedback form (Appendix C) was formulated for the students to collect their perspective about the activity.

2. Result and Discussion

Feedback from the students

A total of 43 students participated in the survey done to gather their opinion about service learning and their activity. Overall, the students gave positive feedback about the activity. As shown in Figure 1, 98% (n=42) of students agreed that the health check/nutrition education activity conducted was indeed a service learning activity. While 93% (n=40) of them agreed that they have applied their learning from CP7013 during the session (Figure 2).

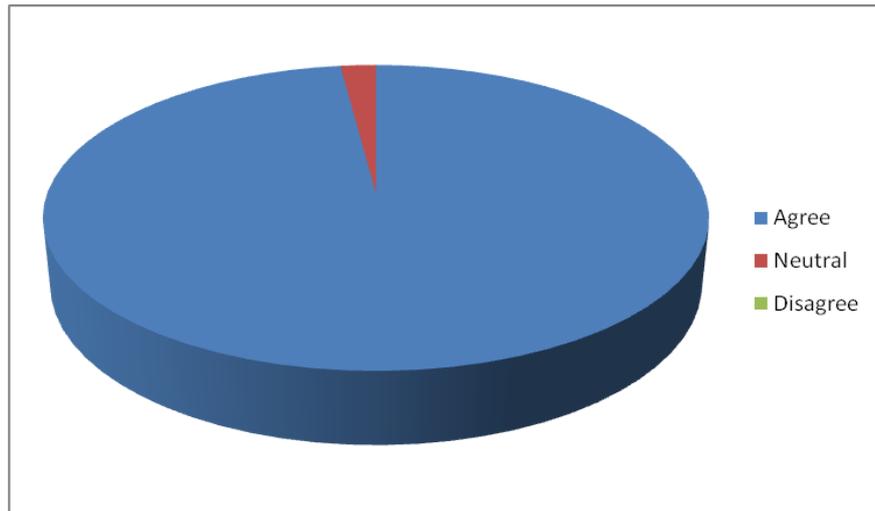


Figure 1. Percentage of students who agreed that the health check/nutrition education session conducted was indeed service learning

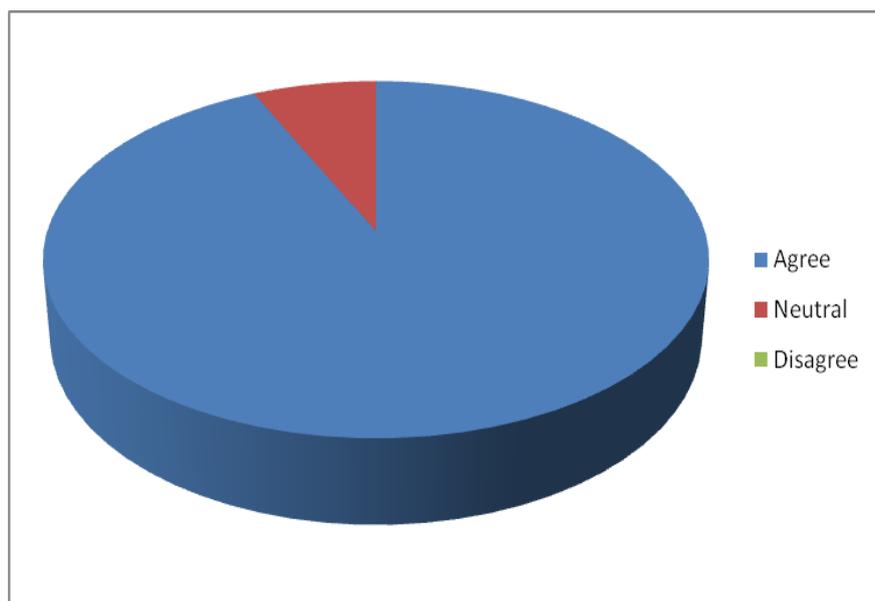


Figure 2. Percentage of students who agreed that they have applied their learning from CP7013 during the session. 100% of the students agreed the session (activity) was a very good learning experience for them and that service learning is a good way of enhancing the teaching and learning experience of DNHW students and 95% (n=41) of them agreed that this activity should be continued in this module.

As shown in Figure 3, the top three skills that they have learned from this activity were communication skills (n=43), enhanced/improved technical skills for checking nutritional/health status (n=39) and time management skills (n=34). This result is comparable to Osman's (2010) study where the students found that the community service experience has improved their communication skills.

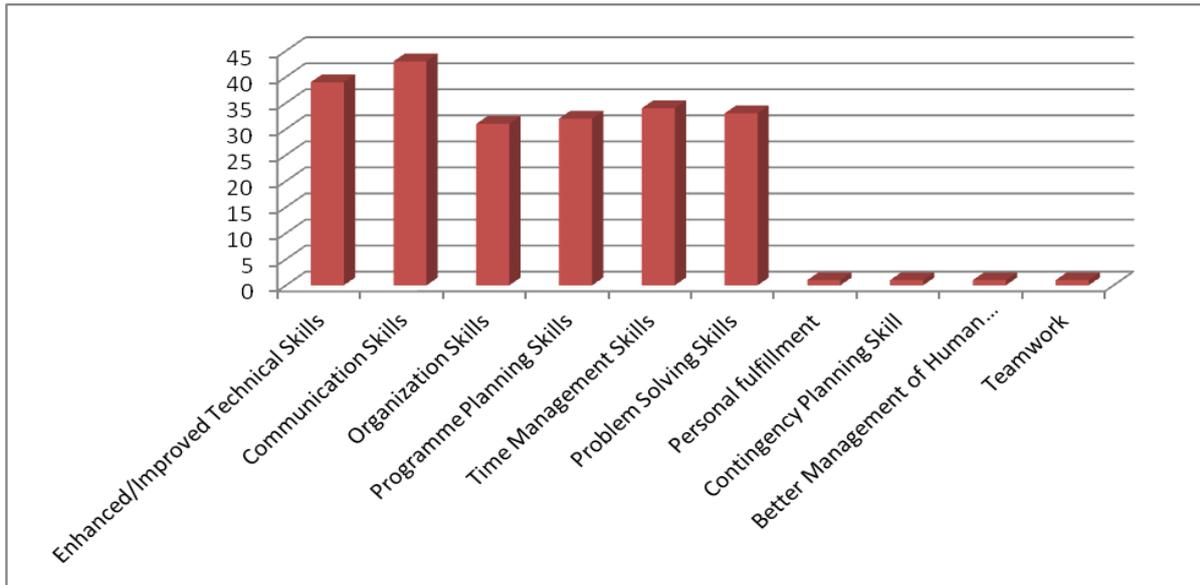


Figure 3. Skills that the students have learned from the activity.

With the aim of letting the students realize that the DNHW modules are interrelated, the students were asked which of the course modules are related to the activity. The top three answers (in Figure 4) were Nutrition and Disease (n=40), Nutrition (n=39) and Speaking Skills for Wellness Professionals (n=37). According to Sandaran (2012), one of the characteristics of effective service learning is integrating service with course content structure. This activity did not only integrate one module (Diet and Nutrition Assessment) but also incorporated knowledge and skills from other modules in the curriculum.

Sandaran also mentioned that linking service to curriculum goals indicated stronger academic outcomes and also led to better mastery of knowledge and skills in comparison to non-service learning courses. For this module, 75% of the students obtained a grade of B+ and above.

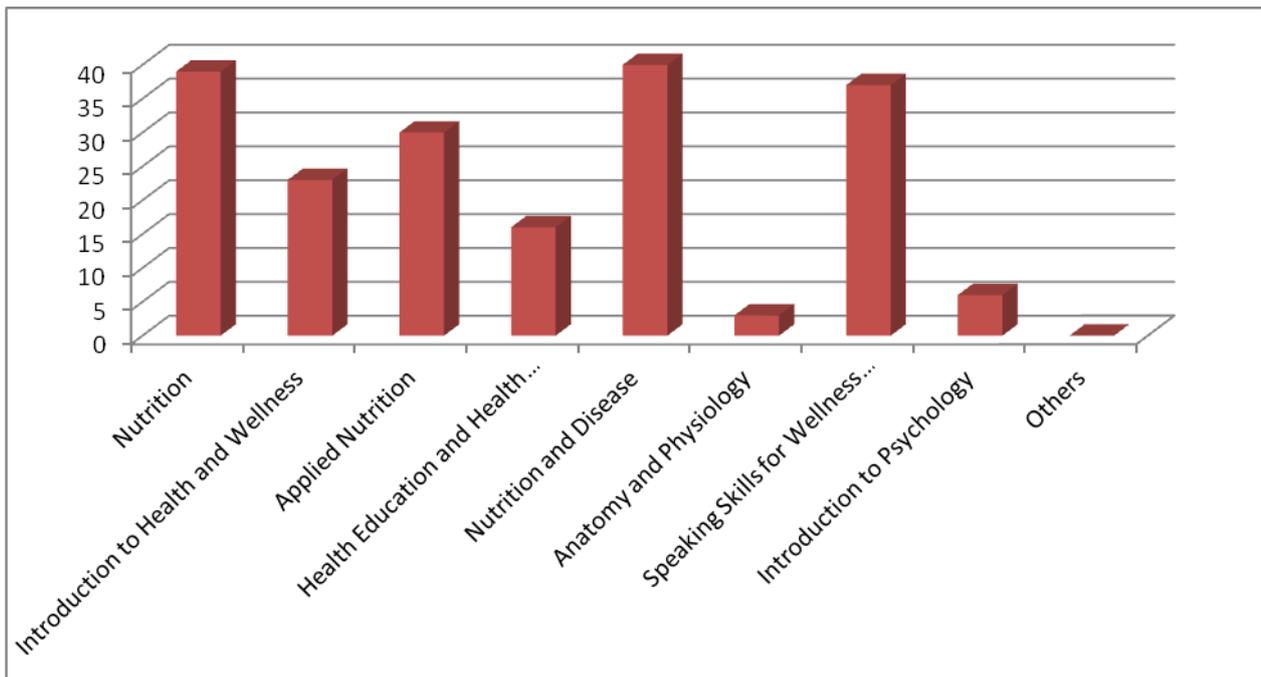


Figure 4. Modules that are related to the activity

Based on their written reflection, most of the students think that the nutritional (health) check session helped the participants by providing them awareness about their nutritional status, which may be costly if done outside. This awareness can help them take care of their health. Those who provided the session for Ulu Pandan elderly residents valued their interaction with the elderly and learned some things about this population. The students also think that the activity helped the participants by giving them practical tips about healthy eating and simple exercise routines. Farley (2003) stated that providers of service expand their understanding of the world through personal engagement in defining and meeting the needs of others – needs that are often foreign to their own life experiences. She said that the process of learning through service can evoke powerful emotions such as admiration for human forbearance through adversity, hope for improvement of the human condition and satisfaction for making a difference in the lives of others. These can be noticed from the students' reflection as well.

In general, students recognized that they could improve on the aspects of planning, communication and management of future similar sessions. This agrees with Sandaran's (2012) statement that service learning is a form of experiential learning, which relates to learning by doing. The learners' reflection relates to an action or experience to gain a deeper understanding of them and construct their own meaning and significance for future actions. Moreover, a study by Osman (2010) showed that students agreed that service learning activities gave them the opportunity to plan their own programme independently.

All of the students agreed that the activity was a very good learning experience for them and that service learning is a good way of enhancing the teaching and learning experience of DNHW students. This is also supported by Osman's conclusion that participating students in service learning are not only able to gain a deeper understanding of their existing knowledge, but also acquire more knowledge (which can be academic in nature) and specific skills.

Feedback from the community participants

All of the SP Library staff (n=17) who participated in the nutritional check and nutrition education agreed that overall, the sessions conducted for them were useful, helpful and informative.

Ulu Pandan participants rated the session for them as good (n=12) and best (n=13) and all of them would like to repeat the nutritional check after six months so they can monitor their health status. Similar feedback was gathered from the Redhill residents.

Some of the comments/suggestions were:

- a. "Very educational"
- b. "Very good. The students are very patient in explaining, very helpful and loveable."
- c. "Friendly, warm, interesting, mutual learning and mutual interaction"
- d. "The health check is interesting"
- e. "Informative and on-the-spot test results"
- f. "We would like to have the students talk to us and check us again"

3. Conclusion

Service learning is a teaching-learning method that is becoming popular, particularly in the community health arena [3]. According to Sandaran (2012), it is a strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities.

This paper introduced the use of service learning in the graded assignment component of Diet and Nutrition Assessment module. Their task was to conduct a nutritional check and nutrition education for a specific community.

Majority of the students agreed that they have applied their knowledge and skills during the session and that this activity should be continued in the module. They also agreed that the activity they conducted was indeed a service learning activity.

Based on the students' feedback, the top three skills that they have learned from this activity are communication skill, enhanced/improved technical skill and time management skill; while the top three modules they think that are related to this activity are Nutrition and Disease, (basic) Nutrition, and Speaking Skills for Wellness Professionals.

The students' reflections about the benefits of service learning to the curriculum, the service provider and recipient are similar with various researches about this form of experiential education.

This paper demonstrates that service learning provided a good learning experience and enhanced the teaching and learning process for DNHW students. It also offered them opportunity to use their education to help the community and relate their classroom learning to actual life setting. Service learning done in the module benefited both the students and the community.

References

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8. Appendix A
CP7013
CONTINUOUS ASSESSMENT
(10% of total grade)

INDIVIDUAL REPORT: 50%
HANDS-ON NUTRITIONAL ASSESSMENT: 50%
 100%

HANDS-ON NUTRITIONAL ASSESSMENT

| Element | 100 | 70 | 40 | 10 |
|-------------------------------------|---|--|---|--|
| Technical skill | Student exhibited excellent technical skills in conducting procedure needed to assess the client's nutritional status without the help of the lecturer | Student exhibited good quality skills in conducting procedure needed to assess the client's nutritional status with minimal help from the lecturer | Student has some technical skill but needed the lecturer's help in conducting procedure needed to assess the client's nutritional status | Student did not have the proper skills and needed the help of the lecturer in conducting procedure needed to assess the client's nutritional status |
| Facilitation & communication skills | Student exhibited excellent communication and facilitation skills among his/her classmates and clients. All activities were well-coordinated and no client was left wandering and clueless about the nutrition check process. | Student exhibited good communication and facilitation skills among his/her classmates and clients. Activities were coordinated and the student had initiative to attend to wandering/clueless clients. | Student has some communication and facilitation skills. Activities were somehow coordinated and the student was able to attend to wandering/clueless clients as per lecturer's instruction. | Student has poor communication and facilitation skills. Activities were not coordinated and the student was not able to attend to wandering/clueless clients |
| Problem solving skills | Student was quick to find out problems related to the nutrition check process and generated good solutions. | Student was able to find out problems related to the nutrition check process and generated possible solutions | Student needed lecturer's help in pointing problems related to the nutrition check process and student tried to generate possible solutions. | Student was not able to notice any problem and lecturer had to point out problem and possible solutions to him/her. |

Appendix B

CP7013

WRITTEN REFLECTION

INSTRUCTION:

1. Work individually.
2. Work on the questions provided below.
3. Minimum number of pages: 5 (1 page = front of A4-sized paper; 2 pages= 1 sheet: front and back). Times New Roman, font size 12 including references.
4. Deadline: On or before 10 January Friday for 01/ 24 January for 02/ 1 Feb for 03(Yr 2013)

Procedure:

At the end of the nutritional check and nutrition education session, submit an individual report on the following:

1. What is the common health related problem(s) facing the adult population in Singapore?
(Example: hypertension, obesity. etc). (20 marks)
2. Describe one task and provide description of the nutritional assessment task that you had provided for the adult population. (Example: Body composition measurement, height measurement, bone density check, etc) (30 marks)
3. In your personal view, how does this community health check session help the adult population?
(20 marks)
4. Reflect on your group's experience (What went well, what can be improved).
(20 marks)
5. Overall layout, appendix and references. (10 marks)

Appendix C

SURVEY ABOUT SERVING LEARNING ACTIVITY IN CP7013 MODULE, S2AY1213

NAME (Optional): _____ Date: _____

CLASS (Mandatory): _____

HEALTH CHECK/NUTRI EDUCATION DONE FOR (Please tick):

_____ SP Library Staff _____ Ulu Pandan senior residents _____ PCF Redhill Blk 70A

“Service learning involves students in the community that addresses local needs, while developing their academic skills, sense of civic responsibility and commitment to the community.”

1. The health check/nutrition education session that we conducted for our specific community/target group was indeed a service learning activity.

_____ Agree _____ Neutral _____ Disagree

2. I have applied what I learned from the CP7013 Diet and Nutrition Assessment lecture, tutorial and practical sessions during the activity.

_____ Agree _____ Neutral _____ Disagree

3. I think that the activity is a very good learning experience for us, DNHW students.

_____ Agree _____ Neutral _____ Disagree

4. What are the skills that you have learned from this activity? (You may tick as many as possible)

_____ Enhanced/improved technical skills for checking nutritional/health status

_____ Communication skills (with classmates and target group)

_____ Organization skills

_____ Programme planning and programme management skills

_____ Time management skills

_____ Problem solving skills

_____ Other skills. Please specify: _____

5. I think that this activity should be continued in this module.

_____ Agree _____ Neutral _____ Disagree

6. I think that this kind of service learning activity is already being implemented in other DNHW module(s) (e.g. Introduction to Health and Wellness) and health events outside of school.

_____ Agree _____ Neutral _____ Disagree

7. Which among the following DNHW modules is/are related and its/their module learning is/are applicable to this activity? (You may tick as many as possible)

_____ Nutrition _____ Introduction to Health and Wellness _____ Applied Nutrition (Nutrition in the Life Cycle)

_____ HEHP _____ Nutrition and Disease _____ Anatomy and Physiology

_____ Speaking Skills for Wellness Professionals _____ Introduction to Psychology

_____ Others. Please specify: _____

8. Service learning is a good way of enhancing the teaching and learning experience of DNHW students

_____ Agree _____ Neutral _____ Disagree

Thank you for participating in this survey!