Class Projects for Junior and Senior Nutrition-Majored Students – A Step Towards Future Professional Life

Farouk El-Sabban*

Department of Food Science and Nutrition, College of Life Sciences, Kuwait University, Safat, Kuwait City, State of Kuwait

*Corresponding Author: Farouk El-Sabban, Professor of Nutrition and Physiology, Department of Food Science and Nutrition, College of Life Sciences, Kuwait University, Safat, Kuwait City, State of Kuwait.

Received: May 26, 2017; Published: June 06, 2017

Background

Nowadays students majoring in nutrition are the future nutritionists. If these students are prepared well academically, the outcome of such would be of great benefit to individuals and different groups of society. The undergraduate nutrition program at Kuwait University is run at the Department of Food Science and Nutrition, College of Life Sciences. Upon completion of the program, a B.Sc. degree in nutrition is granted. Among the courses of the program are those that relate to Public Health Nutrition (FSN 320) and Nutrition of the Population Sub-groups (FSN 321). Students who are enrolled in these two courses are mostly juniors and seniors. The class size varies from 15 to 22 students. At this stage of their educational level, students would have had a good number of courses in basic sciences, nutrition and at least a course in statistics.

The idea of including a class project into the components of these two courses on nutrition of population sub-groups and public health nutrition is to allow these students the opportunity and exposure to conduct a simple research project, write a report that describes what took place, present the findings, and make a PowerPoint presentation. The prevalent thought of the course instructor for these class projects is that students would feel that there is differential change in their educational preparation – especially that they would be approaching graduation and would be employed soon after. Additionally, there is a great need for research in nutrition that should be carried out in Kuwait – and these future nutritionists will be conducting them and will be involved in drawing strategies for combating nutritional problems in society. The class project in such courses would provide a glimpse of what research in this field is like and how to approach a research problem. Additionally, this could be of benefit to those who wish to pursue their graduate studies towards higher academic degrees.

The class project assignment was implemented for several years and all projects were completed successfully. Students appreciated this opportunity and felt that they can pursue similar projects in the future with confidence. This article relays such experience with class projects in these courses, with the hope that they can be implemented in similar courses or related – both, locally or elsewhere.

Implementation of the class project

Following are the steps that were taken towards the initiation and completion of various class projects:

1. As in the case with all university courses, a syllabus is provided to students at the beginning of the semester. The course instructor explores with students many aspects of the course and explains what assignments that students need to do.

2. Among the components of the syllabus is a page that contains some suggested titles for class projects. However, if students would have any other suggestions, they would introduce such and if the course instructor agrees – it would be approved.

3. The course instructor explains the idea of the class project with students and what is being expected. At this time, it is clarified that
students form groups among themselves and each group chooses a title of their class project. Each group involves 3 students, who would carry out an equal share of the work done.

4. It is explained that for each class project, as a simple research endeavor, a questionnaire needs to be constructed and students make interviews with subjects to collect their data. Also, students are told that they would enter their data in a computer and run simple statistics such as: percentages, averages, and standard deviations. Students are made aware of the different means to present their data, such as in graphs and tables.

5. Upon deciding on the titles of the different class projects, the course instructor prepares a table with group numbers, names of students in each group and the title of the chosen class projects – a typical table is shown below. When this phase is accomplished, the deadline for handing in the reports of all projects is indicated.

6. Students are given nearly 2 months of the semester to conduct and conclude their class projects. Thus, it is essential that the choices for class projects by groups should be made as early as possible in the semester.

7. As all of class projects involved construction of questionnaires, students are provided with an advice from the course instructor - as follows: “For all class project assignments, each group will have to design a questionnaire that has a number of questions related to the chosen topic. Your course instructor is always available for you to consult about the questionnaire that your group will have for the class project. Please be aware that it is NOT that easy to have a questionnaire designed - so, my advice is for you to start very early working on this matter - so that your class project will be of value and make your group members have good marks.”

8. Students are advised to collect their data from 50 -60 subjects, based on that each student in a group will collect data from about 20 subjects.

9. Throughout the duration of the class project, any group or a representative of a group would have access to the course instructor for any inquiries or matters. Availability of the course instructor is very vital in this process – as the class project is considered as an educational tool.

10. When asked about how the report about the project and the relevant PowerPoint should be like, the course instructor indicates that items of the questionnaire are designed to answer some points – thus, trying to “simply” report on such answers would be sufficient. Needless to mention, that this involvement in a class project is the very first experience for these students to be in – thus, matters need to be simple and conducive of motivation and to student self-confidence.

11. As the time of the deadline for handing in the class project reports approaches, the course instructor prepares a table of the PowerPoint presentations with specified date for each group. As each group is given 25 minutes for the presentation and for questions and answers, sometimes it is possible to have 2 presentations during class time – if one is short.

12. Presentations are made before the students in the class and in the presence of the course instructor. Every person attending the presentation is provided with a handout prepared by the presenting group and an evaluation form. Each attending student as well as the course instructor evaluates the presentation made by the presenting group. All evaluation scores are collected and an average is calculated and weighed to a percentage towards the final grade for the course, usually 15%.
List of chosen class projects

The following table shows the class projects that were chosen, completed and presented over a span of several semesters. It should be noted that the name of the College changed from the College for Women to the College of Life Sciences in 2014. This is to explain why some class project titles include the College for Women and others include the College of Life Sciences for others. In suggesting the list of titles for class projects, the course instructor changes some titles by introducing new in place of those suggested in an earlier semester. The titles that bear asterisks are those that have been chosen by students more than once – but not in the same semester. As noticed from the project titles, all involve one sector of the community in Kuwait or another – for the purpose of engaging students with such sectors in society. The list of titles shown contains those of class projects that cover a span of nearly 5 years of teaching the two courses involved.

<table>
<thead>
<tr>
<th>Group No.</th>
<th>Names of Group Members</th>
<th>Chosen Titles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>........................ (I.D.)</td>
<td>Is wearing the “Abaya” a factor for obesity?</td>
</tr>
<tr>
<td></td>
<td>........................ (I.D.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>........................ (I.D.)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>........................ (I.D.)</td>
<td>Consumption of red meats among College for Women students</td>
</tr>
<tr>
<td></td>
<td>........................ (I.D.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>........................ (I.D.)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>........................ (I.D.)</td>
<td>Slimming diets – what is being practiced by College for Women students?</td>
</tr>
<tr>
<td></td>
<td>........................ (I.D.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>........................ (I.D.)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>........................ (I.D.)</td>
<td>Physical activity among College for Women students</td>
</tr>
<tr>
<td></td>
<td>........................ (I.D.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>........................ (I.D.)</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>........................ (I.D.)</td>
<td>Preference for beverages among College for Women students</td>
</tr>
<tr>
<td></td>
<td>........................ (I.D.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>........................ (I.D.)</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>........................ (I.D.)</td>
<td>Level of satisfaction about body shape among College for Women Students</td>
</tr>
<tr>
<td></td>
<td>........................ (I.D.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>........................ (I.D.)</td>
<td></td>
</tr>
</tbody>
</table>
**Chosen Titles for Class Projects**

- Slimming diets – what is being practiced by College for Women students?*
- Physical activity among College for Women students*
- Knowledge of nutrition facts and ingredient labels among College of Life Sciences students*
- Frequency of eating fruits and vegetables by College for Women students
- Level of knowledge about nutrition among College for Women students
- Frequency of eating fruits and vegetables by College of Life Sciences students
- How adequate is the nutrition of the elderly in Kuwait?
- Duration of exclusive breast-feeding among mothers in Kuwait
- Type and level of Physical activity among Kuwaiti adults*
- Iron-deficiency anemia among female students and employees at the College for Women
- Nutrition status of elementary school children in Kuwait
- Level of knowledge about nutrition-related diseases among Kuwaitis
- Intake of vitamin and dietary supplements among adult men in Kuwait
- Student consumption of and attitude on power drinks at College for Women, Kuwait University
- Frequency of eating at fast-food restaurants by College for Women students
- Level of satisfaction about body shape among females at College for Women, Kuwait University*
- Is wearing the “Abaya” (the traditional dress code for females) factor for obesity?
- Consumption of red meats among College for Women students
- Preference for beverages among College for Women students

**Execution of class projects**

All student groups completed their projects satisfactorily. However, it must be mentioned that the course instructor was always available to answer students’ inquiries and for mentoring them. After all, this is considered to be as a professional training opportunity for these undergraduate students and they needed to be properly-guided. One major task for student groups to accomplish is to construct a questionnaire. A typical, and simple, example of a questionnaire is shown below. As can be expected, other questionnaires can be longer and more involved; however, the advice was to limit the number of questionnaire items/questions to a maximum of 25. Students were guided to how to conduct interviews with their subjects and collect their data in a pool. Most students entered their data in a Microsoft Excel program and were taught how to handle their data to come up with percentages, averages and standard deviations – and learned to use their data in preparing colorful figures and charts for their reports and for their PowerPoint presentations.

**Physical activity among College for Women students**

1. Age (year):
2. Year at CFW: [ ] 1 / [ ] 2 / [ ] 3 / [ ] 4 / [ ] 5
3. Major (if any):
4. Height: .......... cm
5. Weight: .......... kg
6. What do you use often in College: [ ] Stairs / [ ] Elevator
7. Do you exercise regularly? [ ] Yes (if yes, please continue)
   [ ] No (if no, go to question 14 and continue)

8. How do you prefer to exercise: □ Alone / □ In a group
9. What is your preference for exercise? □ Indoor activity / □ Outdoor activity
10. What kind of exercise do you do? (please list)..............................................................
11. How often do you exercise in a week? ......................
12. For how long do you exercise each time (min)? .........................
13. Why do you exercise?: □ To feel healthy / □ To keep in shape / □ Other reasons (please list): ..............................................................
14. What is your main reason for you not to exercise? □ I have no time / □ I don’t like exercising / □ I don’t know how to start / □ Medical reasons / □ Weather does not allow / □ Others (please specify): ..............................................................
15. Do you think that physical activity is related to health? □ Yes / □ No
16. Do you plan to exercise in the future? □ Yes / □ No

The course instructor’s take on class projects

While the majority of students who have taken these two courses have expressed that they were satisfied with the carrying out of their class project activities and that they benefited from them, the course instructor realized that such an activity was new to most students and such represented a difficulty. However, with proper mentoring and guidance, students prevailed and successfully completed all projects. From the course instructor’s point of view, the following points can be mentioned as advantages of implementing class projects in those courses that involve nutrition and public health:

1. Students choose their membership of a group voluntarily – which is an exercise indicating maturity and willingness to be involved in group work.

2. Formed student groups choose their project titles voluntarily either from the list suggested to them or make suggestions for the projects they wish to carry out. Such an exercise involves aspects of personality development and readiness for team work.

3. Members of groups would strive to formulate an appropriate questionnaire for the purpose of the projects chosen. At this stage students learn that they need to think of the questionnaire items and that such items would be arranged in a logical sequence – so that all answers of such items would provide a collecting picture of what is being studied.

4. Students learn how to interview their subjects and collect answers to their questionnaire items (data).

5. Students learn how to enter their collected data into a computer software program and how to come up with statistical means to express such data.

6. Students practice different ways to best express/present their data – such as in tables, graphs, charts...etc.

7. Students would have the opportunity to write reports that are organized in a scientific fashion and of the best quality they can produce. In this regard, students are shown examples of similar scientific journal articles that would make them think in a scientific way and to have the opportunity to be analytical.

8. Students present their work before the rest of the class and in the presence of the course instructor – which is an exercise in being a public speaker and with self-confidence. Such an exercise is geared towards personal and professional development of these students.

The course instructor, the author of this article, believes that the fore-mentioned advantages of the class projects in the academic preparation of nutrition-majored students would be attained with constant encouragement and motivation of students. Such preparation will have benefits to their career as practicing nutritionists and for those who will pursue their graduate studies towards higher academic
degrees. The information contained herein about this academic activity is shared for the overall benefits to graduates in nutrition and for the standard of their professional services in the future.