Impact of first-year seminar on student engagement, awareness, and general attitudes toward higher education

Bothaina A. Al-Sheeb
College of Engineering, Qatar University, Doha, Qatar and
Qatar Foundation – Academic Bridge Program, Doha, Qatar, and
Mahmoud Samir Abdulwahed and Abdel Magid Hamouda
College of Engineering, Qatar University, Doha, Qatar

Abstract

Purpose – This study intends to add to the existing body of literature on the impact of a newly implemented first year seminar in the College of Law and Business. The purpose of this paper is to evaluate the effects the course have on students in regard to three aspects: student awareness and utilization of resources, interaction patterns, as well as, general interests and attitudes toward higher education.

Design/methodology/approach – The methodology of the assessment included analysis of a survey that has been conducted by the end of Spring 2014 semester. A quasi-experimental design was implemented to measure the impact of the intervention on students' awareness and utilization of resources, interactions, general interests, and attitudes toward higher education. Through the SPSS application, the Mann Whitney U Test, and \( \chi^2 \) tests were used to check for significant differences while comparing the means or frequencies for both groups. For the three questions, the authors have used the 90 percent confidence level and the standard significance level \( p \)-value of 0.05 or less for statistical analysis.

Findings – The results indicated that the course had a highly significant positive impact on student attitudes and awareness of campus resources but had less significant impact on student interactions and utilization of resources. The results in this study reveal a positive impact for the first-year seminar course on student satisfaction and attitudes toward higher education as well as their awareness of campus resources. However, in terms of the course impact on student interaction, results conveyed that students who have participated in the first-year seminar course show a slightly better interaction rate with instructors, academic advisors, and close friends than those in the control group.

Research limitations/implications – The main limitation of this study was that the sample was small. Nonetheless, it has provided valuable insights into the understanding of the social and academic impact of first-year seminars on student engagement; through the use of comparison groups, this study increased the validity of prior research.

Practical implications – The first-year seminar course evaluated in this study demonstrated the potential to support and enhance student social and academic engagement during the first year of college. Based on the results in this study, the study team recommended some revisions to the current first-year seminar model (UNIV P100 Skills for University Success). The team proposed three models for subsequent first-year seminars at this university.

Originality/value – This study adds to the existing literature by examining the impact of a newly implemented first-year seminar course at the College of Law and Business at this university on both academic and non-academic aspects from the students' perspective. These aspects were selected as retention and GPA effects have been widely explored; therefore, the focus is on the less studied emotional and social factors

© Bothaina A. Al-Sheeb, Mahmoud Samir Abdulwahed and Abdulmajeed S. Hamouda. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at http://creativecommons.org/licenses/by/4.0/legalcode

I would like to thank Dr Nancy Allen for her early editing of this manuscript and Enago Academy for the English language editing of the manuscript.
associated with student success and retention. The results from this study can act as a guide for universities intending to introduce a first-year seminar course as it gives clear guidelines on design, content, and course implementation, which can be useful in enhancing general student motivation and attitudes toward academic study and higher education in general.

**Keywords** Higher education, Student engagement, Student attitudes, First-year experience, First-year seminars

**Paper type** Research paper

**Background**
Due to the changes in university admissions policy, there has been a considerable increase in student numbers from different public and international high schools. Previously, the administration and faculty had faced many challenges in meeting the needs of students with different academic capabilities and backgrounds. To better accommodate these variations in student characteristics, the university has launched an intervention, the First Year Experience Program, which included a first-year seminar course.

The first-year seminar (UNIV P100 skills for university success). This university conducted its second first-year seminar in Spring 2014. This one-credit, non-graded (pass/fail) course was offered to students in the College of Business and the College of Law, with a maximum enrollment of 25 students per class. Faculty members or other invited master’s level educational professionals taught this course.

In general, the course aimed to introduce students to the university and assist them in developing essential skills and learning strategies. More specifically, the course involved two goals: to enhance the first-year experience of the new students and to serve as an initial diagnostic stage.

Five essential learning outcomes were developed and identified for this course. At the completion of the course, it was expected that students would be able to demonstrate their abilities as intellectual university students, describe national issues with confidence, utilize university resources, apply their competencies, knowledge, and abilities to activities, and develop enhanced motivation and a positive attitude toward higher education.

Some of the topics the course covered included an introduction to the university, skills for academic success, and campus and community engagement. An important aspect of the first-year seminar course was the focus on informal classroom settings, discussions, reflections, debates, and various activities. Another aspect of this course was that it was based mainly on stakeholder evaluations and feedback.

The course content is summarized in Table I. The course had 13 sections or modules, each of which dealt with a specific topic for two hours a week.

**Literature review**

*Importance of the first year of college*
It has been found that student college success relies heavily on the students’ first-year experiences at college. Each fall, millions of secondary school graduates start a new phase of their academic life. The National Centre for Education Statistics confirmed that in Fall 2015, about 20 million students were expected to join colleges and universities in the USA. Globally, millions of first-year college students arrive on campus with the intention to succeed and excel; however, this desire is usually accompanied by a great deal of anxiety and “fear of failure” (Kidwell, 2005). Consequently, many universities have introduced first-year seminars to assist first-year students to adapt to college life and study requirements. Gardner (1986) found that the interest in first-year seminars was because success in the first year establishes the base for the rest of a student’s college experiences. While some students may be able to navigate their first year and proceed to the next level, many choose to leave before the “first year is over” (Kidwell, 2005). It seems that “as many as 1 in 3 first-year students will not make it back for sophomore year” (US News and World Report Education, 2013).
The challenges students face in their first year are global. Clark and Cundiff (2011), claim that universities around the world pay significant attention to student success and attrition, with greater attention being given to students who are "struggling" in their first year. For this reason, many researchers have confirmed the importance of the first year to overall student academic success (Nelson et al., 2012; McInnis, 2001; Knox and Wyper, 2008; Harvey et al., 2006; Barefoot et al., 2005; Krause et al., 2005). It has also been observed that a student's general interests and attitudes are formed in this crucial year (Barefoot et al., 2005; Krause et al., 2005; Harvey et al., 2006; Knox and Wyper, 2008). For these reasons, many universities have developed various activities and programs for new students. Keup and Barefoot (2005) reported that many colleges have practices in place to ensure a smooth transition for first-year students, such as orientation meetings, general workshops, student mentors, peer advising, learning communities, and, most notably, first-year seminars.

What are first-year seminars?
First-year seminars are designed and structured for first-year students with little or no prior college experience. Kuh (2008) explained that many universities incorporate first-year student seminars and different programs to link students with faculty and other administrative staff in their study plans. At the University of South Carolina, Gardner initiated such courses 40 years ago. The first-year seminar was defined by Hunter and Linder (2005) as a course designed to "assist students in their academic and social development and their transition to college. A seminar, by definition, is a small discussion-based course in which students and their instructors exchange ideas and information. In most cases, there is a strong emphasis on creating community in the classroom." (pp. 275-276).

Another explanation was provided by Barefoot and Fidler (1996), who reported that the term first-year seminars was used to refer to courses that could be classified into two categories. The first category introduces students to university life on campus and everything related to this higher education stage. The second type was when the students worked with faculty members on a certain academic topic of interest to both the student and the faculty member. Currently, first-year seminars are often a combination of both transition and academic content.

### Table I. Content of first-year seminar “UNIV P100 skills for university success”

| Module | Topic | Details |
|--------|-------|---------|
| 1      | Motivation | Students study about the motivation needed for higher education, success skills, and the VARK questionnaire |
| 2      | IT skills | Students study the basic IT "Information Technology" skills essential for the successful use of Blackboard, Microsoft Word, and Power Point |
| 3      | Planning and coping | Students complete the College Student Inventory Survey (CSI) during class. Academic advisors discuss the survey results with the students. Students understand the role of the academic advisors, and are acquainted with the main college rules and policies |
| 4, 5, 6 | Skills for success | Students learn study skills related to learning, research, reporting, and presentation skills |
| 7, 8   | Presentation skills | Students give group presentations and have discussions about their first-year college experiences |
| 9      | Resources | Students learn about the campus resources and support services available to them |
| 10     | Leadership | Students learn about leadership skills and available opportunities for improvement |
| 11, 12 | Future 1 and 2 | In module 11, an invited administration member talks about available study possibilities in college and prospective career paths. In Module 12, students are introduced to career choices, Qatar's National Vision for 2030, as well as Qatar's initiatives and leaders of tomorrow |
| 13     | Reflection | In this session, students discuss and reflect on what has been presented |
Most research has examined the impact of first-year seminars on student academic performance (GPA) and subsequent retention in the following years. Barefoot (2000) claimed that most first-year seminar research tended to widely focus on student retention and performance. A few studies, such as those by Hendel (2001), Hendel (2007), and Erickson and Stone (2012) found that first-year seminars had no direct impact on student retention in the second year. However, most research has reported a positive impact on student retention and performance (Fidler, 1991; Fidler and Moore, 1996; Strake et al., 2001; Lang, 2007; Jamelsk, 2009; Sidle and McReynolds, 1999). Recent studies that have explored the impact on student GPA and retention are Winnie (2012), Berry (2014), Vaughan et al. (2014), and Newman (2016). Some other studies (Williford et al., 2001; Lang, 2007; Cambridge-Williams et al., 2013; Miller and Lesik, 2014) have found that seminar participation increased student retention and graduation rates.

Overall, therefore, most research has reported a positive impact on student performance and retention from first-year seminars. Cuseo (2010) and Padgett et al. (2013) found that student motivation and academic achievement were the outcomes most frequently assessed to gauge the effect of first-year seminars, with some also assessing the social and academic impacts.

Impact of first-year seminars on attitudes and social and academic engagement

Student motivation and their attitudes toward their higher education institutions and academic and social involvement are essential measures when assessing the efficiency of first-year seminars. Some studies have emphasized the positive effect of first-year seminars on both student academic and social outcomes. Several studies such as Strake et al. (2001) and Tobolowsky et al. (2005) have confirmed that not only did participating in a first-year orientation seminar improve retention rates and GPA scores, but it also had a positive impact on student satisfaction with their overall college experience, faculty communication, engagement in extracurricular activities, and various academic, personal, and social skills. In another important study, Keup and Barefoot (2005) found that first-year seminars enhanced both academic and social college experiences and concluded that these seminars had a positive impact on student behavior and changed student perceptions about the overall college experience.

To summarize, research has confirmed that first-year seminars improve student interactions with key college members and improve the use of campus resources. Porter and Swing (2006) found that first-year seminar participants had more out-of-class faculty contact. Yale (2000) also found that students who had participated in the first-year seminar had more interaction with teachers and friends outside class, used campus resources and services better, and had a greater commitment to institutional goals.

First-year student attitudes and satisfaction with overall college experience have been frequently associated with first-year seminar participation. Barefoot et al. (1998) as cited in Hunter and Linder (2005) found that first-year seminar attendance positively impacted student social involvement and attitudes toward higher education. Similarly, studies by Sanchez et al. (2006), Hendel (2007), and Jamelske (2009) reported that seminar participation was associated with overall satisfaction with the first year of college, as well as increased involvement in campus activities and events. Some more recent studies by Laudicina (2014) and Lafferty (2015) also found that first-year seminar attendance led to higher academic skills and better social integration. The National Survey of Student Engagement (2005) revealed that, compared to non-participants, first-year seminar participants “a. were more challenged academically, b. were more likely to be involved in active and collaborative learning activities, c. interacted more frequently with faculty, d. perceived the campus environment as being more supportive, e. gained more from their first year of college, and f. were more satisfied with the college” (National Survey of Student Engagement Report, 2005, p. 15).
This current study was guided by “Tinto’s Theory of departure” (Tinto, 1993), which stated that a student needs to be socially and academically involved to persist at college. Valuable insights were also found in Kuh et al. (2006), who found that the critical determinants of “educational attainment” were related to student perceptions of institutional quality, their willingness to attend the same institution if they had to choose again, and satisfaction with their experience.

Therefore, the current study sought to add to the research on the effects first-year seminars have on student awareness, the utilization of campus resources, interactions inside and outside class, and attitudes toward the university and higher education in general.

**Uniqueness of the study**

This study adds to the existing literature by examining the impact of a newly implemented first-year seminar course at the College of Law and Business at this university on both academic and non-academic aspects from the students’ perspective. These aspects were selected as retention and GPA effects have been widely explored; therefore, the focus is on the less studied emotional and social factors associated with student success and retention. The results from this study can act as a guide for universities intending to introduce a first-year seminar course as it gives clear guidelines on design, content, and course implementation, which can be useful in enhancing general student motivation and attitudes toward academic study and higher education in general.

**Objectives and hypothesis**

This study, one of the first to explore the effects of first-year seminars in this national setting, investigated the impact of the first-year seminar on three aspects of the first-year experience.

The following three questions guided this study:

*RQ1.* Did the first-year seminar have any significant impact on student awareness and utilization of campus resources?

*RQ2.* Were there any major increases in student interactions with instructors, advisors, and close friends?

*RQ3.* Did student attitudes toward higher education change in terms of overall student satisfaction, commitment to finish college, and responsible behavior?

These questions were rewritten as the following null hypotheses:

*H1.* There is no difference between the first-year seminar group and the control group in terms of awareness and utilization of campus resources.

*H2.* There is no difference between the first-year seminar group and control group in interactions with key college members.

*H3.* There is no difference between the first-year seminar group and the control group in attitudes toward higher education.

**Methodology**

*Research design and context*

This study attempted to determine whether the recently implemented seminar course had an impact on the transition to a new campus environment for first-year students.

A between-participants experimental design was used to compare student awareness and utilization of campus resources, student interactions inside and outside class, and
general attitudes toward higher education in first-year seminar participants and a control group that did not attend the course. The study focused on the first-year seminar course conducted in the College of Business and the College of Law, a public four-year institution.

Participants
A questionnaire was developed and administered to 277 first-year students during the first-year seminar lectures and three 100-level courses from the five general college “core courses” in Spring 2014. This university has five high impact core courses in the first-year. Participation in the survey was voluntary and students were asked not to answer the survey if they had already done so in another class. Students completed the three-page survey at the end of the class. A sample of 60 students for the experimental and control groups was the research aim. The response rate was 100 percent for the experimental group, but only 67 percent for the control group. After excluding students from other colleges and those who had completed more than 30 credit hours, the final sample consisted of 85 students from the first-year seminar (seminar group) and 40 other students (control group).

Instrumentation
A questionnaire was designed to explore the research questions. The introductory section gave general information about the study and sought basic demographics and background information; age, gender, nationality, college, high school type, and credit hours registered. The first section sought information about student awareness of campus resources (17 items), for which the participants were asked to indicate their awareness of each service or resource by selecting “yes” or “no,” and by rating their utilization frequency for each of the resources on the list using a three-item scale: “frequently,” “occasionally,” and “not at all.” The second section sought information about interaction frequency (by phone, e-mail, SMS, personally) with key higher education members – faculty, academic advisors, close friends, and teaching assistants – on a seven item scale: “never,” “once or twice per semester,” “once or twice per month,” “once a week,” “twice or three times a week,” or “daily.” Each scale was assigned a specific value to facilitate the data analysis, the values for which are shown in Table II. In the third section, titled “general attitudes,” information was sought as to the degree to which students agreed or disagreed with the provided statements. This section had three subsections: student overall satisfaction, commitment and capability of finishing college, and citizenship responsibility behavior. Responses were recorded on a five-item Likert scale: 1. Strongly dissatisfied, 2. Dissatisfied, 3. Neutral, 4. Satisfied, and 5. Strongly satisfied. Details are provided in Table II.

Data collection procedure
The first-year seminar course and the three courses from the 100-level package were selected for the survey, all of which were identified by the college administration as “high impact” or essential courses for first-year students. An e-mail was sent to instructors to seek permission for the researcher to administer the survey in the last 10 minutes of class time. Participation in this paper-pencil survey was voluntary, and it was made clear that students did not have to answer if they had already done so in another class. The survey was administered in Arabic to make it more accessible to first-year students. Students returned the completed questionnaire to the researcher at the end of the class.

Data analysis procedure
Data were analyzed using SPSS v. 24. First, descriptive statistics were generated to gain an overall picture of the collected sample. To determine whether there were any significant
differences between the seminar group (first-year seminar participants or intervention group) and the control group (students who did not participate in the seminar), a $\chi^2$ statistical test was used to analyze the data from the first section, “awareness and utilization of campus resources,” and since the other two sections, “students’ interaction” and “students’ attitudes” had discrete or continuous variables, the non-parametric Mann Whitney independent sample test was used.

| I. Awareness and Utilization of support services |
|-----------------------------------------------|
| Are you aware of each of the following campus resources/support services? (“Yes”/ “No”) |
| How often have you utilized each of the following campus resources/support services? (“Frequently,” “occasionally,” and “not at all.”) |
| 1. Printing and photocopy service |
| 2. Financial Aid |
| 3. Transportation (e.g., campus express) |
| 4. Students call center |
| 5. Academic advising |
| 6. Textbooks |
| 7. Group therapy |
| 8. Students Learning Support Centre (e.g., writing labs) |
| 9. Qatar University Centre for Volunteer Work |
| 10. Career Services |
| 11. Library |
| 12. Student Council |
| 13. International students |
| 14. Student Employment |
| 15. Student Clubs |
| 16. Sport Activities |
| 17. Voluntary work and Community Service |

| II. Frequency of Interaction |
|-----------------------------|
| Scale used: (Never “0” – 1 – 2 times per semester “1” – 1 – 2 per month “2” – Once a week “3” – 2 – 3 times per week “4” – Daily “4”) |
| 1. How often have you interacted with this course instructor outside of class? |
| 2. How often have you interacted with course instructors outside of class? |
| 3. How often have you interacted with academic advisors/ counselors? |
| 4. How often have you interacted with close friends at this institution? |
| 5. How often have you interacted with graduate students/teaching assistants? |

| II. Students’ Attitudes towards Higher Education |
|-----------------------------------------------|
| Lickert scale used (strongly Agree “5” - Agree “4” - Neutral “3” - Disagree “2” - Strongly Disagree “1”) |
| a. Student Overall Satisfaction |
| 1. I am having a great college experience. |
| 2. I think Qatar University is offering high-quality education for its students. |
| 3. I would choose to register in QU if I had the choice to start over again. |
| b. Commitment and capability to finish college |
| 1. I feel responsible for my education and learning. |
| 2. I feel capable of continuing my academic studies. |
| 3. Having an undergraduate degree is important. |
| 4. I will continue to study in Qatar University |
| c. Citizenship responsibility behavior |
| 1. I have a good knowledge about Qatar National Vision 2030. |
| 2. I am aware of the UREP program for undergraduate students. |
| 3. I will be a valuable member to achieve change and development through my future career. |
| 4. I know how to develop my leadership skills through the services and activities offered by QU. |

Table II.
Items used for each variable
Results
This study was designed to assess the effectiveness of the first-year seminar that was run for the second time at this university in the year following this research study. To begin with, general demographic and background characteristics were analyzed to determine if there were any significant differences between the two groups in high school grade point average, number of credit hours in the current semester (Spring, 2014), number of credit hours in the following semester (Fall, 2014), number of credit hours completed till date, and the number of hours spent studying per week. As shown in Table III, there were no major differences between the two groups. There was a small difference in the number of credit hours completed by both groups, with the credit hours completed by the control group being slightly greater than for the seminar group. In this study, “C” is used to refer to the control students and “S” is used to refer to students who participated in the seminar.

This study was based on a comparison of two groups – students in the first-year seminar course and students in the control group. To assess the outcomes, a mixed methods approach was utilized. The first three research questions compared the two groups based on awareness and utilization of campus resources, interactions inside and outside class, and general attitude toward higher education, which was further divided into overall college satisfaction, commitment and capability to finish college, and citizenship responsibility behavior.

The analysis has been divided into three main sections.

Section 1: impact of first-year seminar on awareness and utilization of campus resources: Awareness of campus resources. In the survey, students were asked about their knowledge of the 17 services and resources available at the university by answering yes or no. Table IV shows that, of the 17 services and resources, the “yes” responses were higher for the S students than for the C students, with the difference being significant for 4 out of the 17 services. Main significant differences were found in student awareness of the following services: financial aid, transportation (e.g. campus express), Student Learning Support Centre (writing lab), student employment, as well as printing and photocopying services and the lower rates for Student Council.

Therefore, it could be concluded that the first-year seminar course seemed to have had a positive impact on the S student awareness of campus resources/services. To confirm this, the overall awareness of campus resources was calculated based on the total number of “yes” responses for each student. The team used a Mann Whitney test to determine if there were any significant differences between the C and S groups. Table V indicates that the S groups scored significantly higher than the C group, therefore, the null hypothesis was rejected for student awareness of campus resources.

| Variable                                                                 | Mean | P-value (Mann Whitney U test) | Statistical significance |
|--------------------------------------------------------------------------|------|-------------------------------|--------------------------|
| 1. What was your final grade in high school?                             | C 85.53 | 0.174                        | No                       |
|                                                                          | S 87.39 |                               |                          |
| 2. How many credit hours have you registered for this semester (Spring, 2014)? | C 12.03 | 0.238                        | No                       |
|                                                                          | S 12.24 |                               |                          |
| 3. How many credit hours have you registered for next semester (Fall, 2014)? | C 11.96 | 0.959                        | No                       |
|                                                                          | S 11.42 |                               |                          |
| 4. How many credit hours have you completed till now?                    | C 13.43 | 0.042*                       | Yes                      |
|                                                                          | S 9.46  |                               |                          |
| 5. How many hours per week do you usually spend on studying-related activities for your currently registered courses (excluding lecture time)? | C 5.08  | 0.171                        | No                       |
|                                                                          | S 6.21  |                               |                          |

Table III. Descriptive statistics (sample: control group “C” = 40, seminar group “S” = 85)
Students’ utilization of campus resources. In this section, students were asked to identify how frequently they utilized the 17 resources. For each campus resource on the list, students had to select either “frequently,” “occasionally,” or “not at all.” Frequencies as well as $\chi^2$ tests were employed to analyze the student utilization of campus resources. Table VI indicates that there were no significant differences between the C and S groups; therefore, the null hypothesis was accepted. This finding was attributed to the differences in the number of credit hours registered by each group. The descriptive statistics in Table III indicate that the...
number of credit hours completed by the C group were significantly higher than for the S groups; therefore, it could be surmised that the utilization of campus resources may be influenced by the number of credit hours completed.

Section 2: impact of first-year seminar on interaction with key college members
Based on the results from the four questions under frequency of interactions with instructors, advisors, and friends, no significant differences were found between the two groups (Table VII); therefore, the null hypothesis was accepted. In general, higher means were received for S student groups than for the C group. This was most evident in question 1: “the interaction with course instructors outside the classroom”; and question 2; “interaction with close friends.”

Section 3: impact of first-year seminar on student attitudes toward higher education
The questionnaire asked students to select the degree to which they agreed with 11 statements relating to student attitudes toward higher education on a five-level Likert scale organized under

| Frequency of students' utilization of campus resources | Group | Frequently (%) | Occasionally (%) | Not at all (%) | Pearson $\chi^2$ | Sig. |
|-------------------------------------------------------|-------|----------------|-----------------|---------------|-----------------|-----|
| 1. Printing and photocopy service                      | C     | 46             | 38              | 17            | 0.591           | 0.744 |
|                                                      | S     | 53             | 29              | 18            |                 |      |
| 2. Financial Aid                                       | C     | 25             | 13              | 63            | 2.895           | 0.235 |
|                                                      | S     | 13             | 4               | 83            |                 |      |
| 3. Transportation (e.g. campus express)                | C     | 18             | 27              | 55            | 1.302           | 0.521 |
|                                                      | S     | 12             | 40              | 47            |                 |      |
| 4. Students call center                                | C     | 50             | 0               | 50            | 1.928           | 0.381 |
|                                                      | S     | 32             | 9               | 59            |                 |      |
| 5. Academic advising                                  | C     | 65             | 23              | 12            | 0.353           | 0.838 |
|                                                      | S     | 61             | 23              | 16            |                 |      |
| 6. Textbooks Department                               | C     | 50             | 36              | 14            | 1.659           | 0.436 |
|                                                      | S     | 50             | 25              | 25            |                 |      |
| 7. Group therapy                                      | C     | 17             | 17              | 67            | 3.92            | 0.141 |
|                                                      | S     | 14             | 0               | 86            |                 |      |
| 8. Students Learning Support Center (e.g. writing labs)| C     | 43             | 0               | 57            | 0.841           | 0.657 |
|                                                      | S     | 32             | 2               | 66            |                 |      |
| 9. Qatar University Center for Volunteer Work         | C     | 17             | 17              | 67            | 6.783           | 0.034 |
|                                                      | S     | 11             | 0               | 89            |                 |      |
| 10. Career services                                   | C     | 23             | 8               | 69            | 0.026           | 0.987 |
|                                                      | S     | 23             | 6               | 71            |                 |      |
| 11. Library                                           | C     | 48             | 30              | 22            | 0.043           | 0.978 |
|                                                      | S     | 46             | 33              | 21            |                 |      |
| 12. Student Counsel                                   | C     | 23             | 8               | 69            | 1.965           | 0.374 |
|                                                      | S     | 10             | 3               | 87            |                 |      |
| 13. International students                            | C     | 10             | 20              | 70            | 2.468           | 0.291 |
|                                                      | S     | 12             | 4               | 85            |                 |      |
| 14. Student Employment                                | C     | 13             | 6               | 81            | 0.788           | 0.674 |
|                                                      | S     | 18             | 2               | 80            |                 |      |
| 15. Student Clubs                                     | C     | 12             | 12              | 76            | 1.169           | 0.557 |
|                                                      | S     | 24             | 10              | 66            |                 |      |
| 16. Sport Activities                                  | C     | 20             | 10              | 70            | 0.174           | 0.917 |
|                                                      | S     | 22             | 13              | 65            |                 |      |
| 17. Voluntary work and Community Service              | C     | 13             | 19              | 69            | 1.1             | 0.575 |
|                                                      | S     | 18             | 9               | 74            |                 |      |

Table VI. Utilization of campus resources
Note: (Sample: control group “C” = 40, seminar group “S” = 85)
three sections: overall satisfaction with first-year experiences (three statements); commitment and capability to finish college (four statements); and citizenship responsibility behavior (four statements). The first section measured the overall satisfaction with their college experience, in which a significant difference was found between the two groups ($p$-value $= 0.048$), which indicated that the S students felt happier with their college experiences than the C students. Similar results were also found in the second section – commitment and capability to finish college – in which there was a significant difference between the S groups and the C group ($p$-value of 0.05); therefore, the null hypothesis was rejected for the first two sections for attitudes toward higher education. However, no significant differences were found between the two groups in the third section – responsibility behavior; however, the overall score for student attitudes toward higher education (including the three sub-areas) indicated that the first-year seminar had a significant impact on positive attitudes and satisfaction with the college. As the difference between the two groups was significant with a $p$-value of 0.05, the null hypothesis was rejected as there was a more positive impact on the attitudes of the first-year seminar students. Detailed results are shown in Table VIII.

### Discussion and conclusion

**Discussion of study findings**

To conclude, this study contributes to literature on the effectiveness of first-year seminars, with most results being consistent with Tobolowsky *et al.* (2005), “Exploring the Evidence IV.”

This study found that the first-year seminar at this university had a significant impact on student awareness of campus resources. However, the utilization frequency of campus resources did not reveal any significant differences between the two groups, which appeared to be related to the number of credit hours completed by each group, as the C group hours were significantly higher than the S group’s. The impact of the first-year seminar on student awareness was consistent with most previous research, except in terms of the utilization frequency of campus resources, which was not consistent with Yale (2000) or Lafferty (2015).

Second, from the results for “student interaction with key members in higher education,” the course appeared to have a less significant impact. Nonetheless, students who had participated in the first-year seminar course were found to have a slightly better interaction with instructors, academic advisors, and close friends than the C group, which was similar to the results in Yale (2000), the National Survey of Student Engagement (2005), Tobolowsky *et al.* (2005), and Porter and Swing (2006).
The third part of this study explored the effect of the seminar on general attitudes toward university education in three sections—general satisfaction, commitment and capability to finish college, and citizenship responsibility behavior. It was found that the seminar had a clear positive influence on student perceptions of education quality, and more S group students expressed a greater commitment to continuing their studies at this university, as well as greater awareness of how to develop their own leadership skills using the available training opportunities; however, there was no clear significant difference between the two groups in terms of citizenship responsibility behavior, all of which were in line with the results in Sanchez et al. (2006), the National Survey of Student Engagement (2005), and Lafferty (2015), but were contrary to Hendel (2007), which found no impact on overall satisfaction for first-year seminar students.

Overall, the results showed that the first-year seminar significantly increased positive attitudes toward the college. When higher education institutions assist new students with the challenges they are facing, first-year seminars could substantially reduce students’ fears and uncertainties, leading to a happier college experience. When students feel satisfied, they are more likely to persist and excel in their academics.

**Implications for practice**

The first-year seminar course evaluated in this study demonstrated the potential to support and enhance student social and academic engagement during the first year of
college. Based on the results in this study, the study team recommended some revisions to the current first-year seminar model (UNIV P100 Skills for University Success). The team proposed three models for subsequent first-year seminars at this university.

The first proposed model is a three-credit three contact-hour generic course based on standard grades (e.g. A, B, C). This course would be an extension of the first-year seminar piloted in Fall 2013 and conducted for a second time in Spring 2014, and would be taken in the first semester after registration. The content would include 15 contact hours of extended IT training and 15 contact hours for UNIV P100 topic extensions; in particular, study skills, communication (presentation and writing) skills, critical thinking, career planning, leadership, and psychometric assessments, in addition to other potential topics on ethics, academic integrity and plagiarism, common reading, and a community engagement project.

The second proposed model is a three credit “hybrid” course of five contact hours, consisting of a combination of theory and practical work. In this context, a “hybrid” course means a course that involves discipline or major-related content (e.g. Introduction to Business) as well as other generic content similar to the content suggested in the first model.

The third proposed model is a six-credit course, with three credits for a generic, graded course of three contact hours per week as well as a three-credit graded discipline course of three contact hours per week. The three-credit generic course would cover the same content as the first model and the content of the other three-credit discipline course would be intended as an introduction to a major (e.g. Introduction to Business).

Limitations of the study
The main limitation of this study was that the sample was small. Nonetheless, it has provided valuable insights into the understanding of the social and academic impact of first-year seminars on student engagement; through the use of comparison groups, this study increased the validity of prior research.

Recommendations for future research
The next step would be to explore the effects of different types of seminars on academic retention and other types of social and academic involvement. It would also be valuable to explore whether the impact of the seminar differed based on gender and major.

Conclusion
In conclusion, the findings in this study have valuable implications for teachers and university administrators. This first-year seminar proved effective in increasing positive perceptions toward higher education quality and the awareness of support available. Positive student attitudes toward the university in first-year can lay the foundation for future persistence and success; therefore, it is important for higher education to continue to explore high impact practices in order to make a real difference to students’ lives.

References
Barefoot, B.O. (2000), “The first year experience”, About Campus, Vol. 4 No. 6, pp. 12-18, available at: www.unb.ca/saintjohn/teachlearn_resources/bb.pdf
Barefoot, B. and Fidler, P. (1996), “The 1994 national survey of freshman seminar programs: Continuing innovations in the collegiate curriculum”, Monograph No. 20, The University of South Carolina, National Resource Center for The Freshman Year Experience and Students in Transition, Columbia, SC.
Barefoot, B.O., Warnock, C.L., Dickinson, M.P., Richardson, S.E. and Roberts, M.R. (1998), “Exploring the evidence: reporting outcomes of first-year seminars. The First-Year Experience”, Volume II, Monograph Series No. 25, National Resource Center for the First-Year Experience and Students in Transition, Columbia.

Barefoot, B.O., Gardner, J.N., Cutright, M., Morris, L.V., Schroeder, C.C., Schwartz, S.W., Siegel, J.J. and Swig, R.L. (2005), Achieving and Sustaining Institutional Excellence for the First Year of College, Jossey-Bass, New York, NY.

Berry, M.S. (2014), “The effectiveness of extended orientation first year seminars: a systematic review and meta-analysis”, available at: http://ir.library.louisville.edu/etd/105/ (accessed June 20, 2016).

Cambridge-Williams, T., Winsler, A., Kitsantas, A. and Bernard, E. (2013), “University 100 orientation courses and living-learning communities boost academic retention and graduation via enhanced self-efficacy and self-regulated learning”, Journal of College Student Retention: Research, Theory & Practice, Vol. 15 No. 2, pp. 243-268, available at: https://doi.org/10.2190/CS.15.2.f

Clark, M.H. and Cundiff, N.L. (2011), “Assessing the effectiveness of a college freshman seminar using propensity score adjustments”, Research in Higher Education, Vol. 52 No. 6, pp. 616-639.

Cuseo, J. (2010), “The empirical case for the first year seminar: promoting positive student outcomes and campus-wide benefits”, The First Year Seminar: Research-Based Recommendations for Course Design, Delivery, and Assessment, Kendall/Hunt, Dubuque, IA, pp. 1-33, available at: http://webs.wichita.edu/depttools/depttoolsmemberfiles/OFDSS/101%20FYS%20Research/FYS-empirical-evidence-10.pdf

Erickson, S.L. and Stone, M.F. (2012), “First year experience course: insights from the first two years”, American Journal of Business Education (Online), Vol. 5 No. 2, pp. 139-148.

Fidler, P.P. (1991), “Relationship of freshman orientation seminars to sophomore return rates”, Journal of The Freshman Year Experience, Vol. 3 No. 1, pp. 7-38.

Fidler, P.P. and Moore, P.S. (1996), “A comparison of effects of campus residence and freshman seminar attendance on freshman dropout rates”, Journal of The Freshman Year Experience and Students in Transition, Vol. 8 No. 2, pp. 7-16.

Gardner, J.N. (1986), “The freshman year experience”, College and University, Vol. 61 No. 4, pp. 261-274.

Hendel, D.D. (2001, April), “The relative contribution of participating in a first-year seminar on student satisfaction and retention into the sophomore year”, ERIC Document Reproduction Service No. ED453724, paper presented at the annual meeting of the American Educational Research Association, Seattle, WA.

Hendel, D.D. (2007), “Efficacy of participating in a first-year seminar on student satisfaction and retention”, Journal of College Student Retention: Research, Theory & Practice, Vol. 8 No. 4, pp. 413-423.

Harvey, L., Drew, S. and Smith, M. (2006), The First Year Experience: A Review of Literature for the Higher Education Academy, The Higher Education Academy, New York, NY.

Hunter, M.A. and Linder, C.W. (2005), “First-year seminars”, in Upcraft, M.L., Gardner, J.N., Barefoot, B.O., et al.(Eds), Challenging and Supporting the First Year Student: A Handbook for Improving the First Year of College, Jossey-Bass, San Francisco, CA, pp. 275-291.

Jamelske, E. (2009), “Measuring the impact of a university first-year experience program on student GPA and retention”, Higher Education, Vol. 57 No. 3, pp. 373-391.

Keup, J. and Barefoot, B. (2005), “Learning how to be a successful student: exploring the impact of first-year seminars on student outcomes”, Journal of The First-Year Experience & Students in Transition, Vol. 17 No. 1, pp. 11-47.

Kidwell, K.S. (2005), “Understanding the college first year experience”, The Clearing House: A Journal of Educational Strategies, Issues, and Ideas, Vol. 78 No. 6, pp. 253-256.

Knox, H. and Wyper, J. (2008), “Quality enhancement themes: the first year experience: personalisation of the first year”, available at: www.enhancementthemes.ac.uk/documents/firstyear/Transition%20%20Final.pdf (accessed June 20, 2016).
Krause, K.L., Hartley, R., James, R. and McInnis, C. (2005), *The First Year Experience in Australian Universities: Findings from a Decade of National Studies*, Department of Education, Science, and Training, Melbourne.

Kuh, G.D. (2008), *High-Impact Practices: What they Are, Who Has Access to them, and Why they Matter*, Association of American Colleges and Universities, Washington, DC, available at: http://provost.tufts.edu/celt/files/High-Impact-Ed-Practices1.pdf (accessed July 31, 2016).

Kuh, G.D., Kinzie, J.L., Buckely, J.A., Bridges, B.K. and Hayek, J.C. (2006), *What Matters to Student Success: A Review of the Literature*, Vol. 8, National Postsecondary Education Cooperative, Washington, DC.

Lafferty, K. (2015), “The impact of participation in a first-year seminar on increased usage of campus resources, academic and social integration and first-to-second-semester persistence at a two-year community and technical college”, doctoral dissertation, University of Louisville, Louisville.

Lang, D.J. (2007), “The impact of a first-year experience course on the academic performance, persistence, and graduation rates of first-semester college students at a public research university”, *Journal of The First-Year Experience and Students in Transition*, Vol. 19 No. 1, pp. 9-25.

Laudicina, K. (2014), *Helping Students Succeed in College: The Role of a First-Year Seminar*, Pepperdine University, Ann Arbor.

McInnis, C. (2001), “Researching the first year experience: where to from here?”, *Higher Education Research & Development*, Vol. 20 No. 2, pp. 105-114.

Miller, J.W. and Lesik, S.S. (2014), “College persistence over time and participation in a first-year seminar”, *Journal of College Student Retention: Research, Theory and Practice*, Vol. 16 No. 3, pp. 373-390.

National Survey of Student Engagement (2005), “Exploring different dimensions of student engagement: 2005 annual results”, available at: http://nsse.iub.edu/pdf/NSSE2005_annual_report.pdf (accessed February 24, 2015).

Nelson, K.J., Smith, J.E. and Clarke, J.A. (2012), “Enhancing the transition of commencing students into university: an institution-wide approach”, *Higher Education Research & Development*, Vol. 31 No. 2, pp. 185-199.

Newman, J. (2016), “A first-year experience course and its relationship to retention and academic success at a public community college”, doctoral dissertation, East Tennessee State University, Ann Arbor.

Padgett, R.D., Keup, J.R. and Pascarella, E.T. (2013), “The impact of first-year seminars on college students’ life-long learning orientations", *Journal of Student Affairs Research and Practice*, Vol. 50 No. 2, pp. 133-151, available at: http://dx.doi.org/10.1515/jsarp-2013-0011

Porter, S.R. and Swing, R.L. (2006), “Understanding how first-year seminars affect persistence”, *Research in Higher Education*, Vol. 47 No. 1, pp. 89-109.

Sanchez, R.J., Bauer, T.N. and Paronto, M.E. (2006), “Peer-mentoring freshmen: implications for satisfaction, commitment, and retention to graduation”, *Academy of Management Learning & Education*, Vol. 5 No. 1, pp. 25-37.

Sidle, M.W. and McReynolds, J. (1999), “The freshman year experience: student rotation and student success”, *NASPA Journal*, Vol. 36 No. 4, pp. 288-300.

Starke, M.C., Harth, M. and Siriani, F. (2001), “Retention, bonding, and academic achievement: success of a first-year seminar", *Journal of the First Year Experience & Students in Transition*, Vol. 13 No. 2, pp. 7-36.

Tinto, V. (1993), *Leaving College: Rethinking the Causes and Cures of Student Attrition*, 2nd ed., University of Chicago Press, Chicago, IL.

Tobolowsky, B.F., Cox, B.E. and Wagner, M.T. (Eds) (2005), “Exploring the evidence: reporting research on first-year seminars”, Vol. 3, The University of South Carolina, National Resource Center for The First Year Experience and Students in Transition, Columbia, SC, pp. 1-198.
US News and World Report Education (2013), *Freshman Retention Rate*, available at: http://colleges.usnews.rankingsandreviews.com/best-colleges/rankings/regional-universities/freshmen-least-most-likely-return (accessed June 30, 2013).

Vaughan, A., Parra, J. and Lalonde, T. (2014), “First-generation college student achievement and the first-year seminar: a quasi-experimental design”, *Journal of The First-Year Experience & Students in Transition*, Vol. 26 No. 2, pp. 51-67.

Williford, A.M., Chapman, L.C. and Kahrig, T. (2001), “The university experience course: a longitudinal study of student performance, retention, and graduation”, *Journal of College Student Retention: Research, Theory & Practice*, Vol. 2 No. 4, pp. 327-340, available at: https://doi.org/10.2190/K7K9-91EG-E6F9-EVMK

Winnie, Y.Y. (2012), *Improving College Freshman Retention*, Southern Connecticut State University, Ann Arbor.

Yale, A.A. (2000), “The impact of a one-credit freshman seminar on student retention, academic progress, and academic and social integration, while controlling for the volunteer effect”, *Dissertation Abstracts International*, Vol. 61 No. 1, pp. 1-53.

Further reading

College Student Inventory™ (n.d.) (2017), available at: www.ruffalonl.com/complete-enrollment-management/student-success/rnl-retention-management-system-plus/college-student-inventory (accessed August 20, 2017).

Corresponding author

Bothaina A. Al-Sheeb can be contacted at: 200669067@qu.edu.qa

For instructions on how to order reprints of this article, please visit our website: www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: permissions@emeraldinsight.com