

Incorporating e-mail in teaching activities of the nutrition program at College for Women, Kuwait University: Assessment of a 5-year experience

ABSTRACT

Use of nowadays technology in education is multi-faceted, among which is the use of e-mail in communication. This paper relates a 5-year experience in utilizing e-mail in teaching activities of the nutrition program at the College for Women, Kuwait University. The course instructor establishes an e-mail account for each individual course for the instructor to send information and documents. **Analysis of e-mail messages by instructor** were **(%)**: handouts and syllabi **(28)**, reminders and notices **(21)**, assignment-related **(20)**, materials of interest **(19)**. Messages from students were **(%)**: assignment-related **(40)** and non-assignment related **(60)**. Assignment-related messages from students were about **(%)**: requesting postponement of deadline for assignments **(37)**, sending assignments as attachments to messages **(34)**, apology for late assignment submission **(16)**, and inquiries about assignments **(13)**. Results of a survey showed that 74% of students recommend the use of the e-mail system as experienced. Students indicated their comfort with e-mail and some suggested the use of other available technology. The instructor's perceived advantages of using e-mail in this manner are numerated and its utilization is recommended. Using e-mail in university teaching activities and in maintaining a satisfactory level of student-teacher communication can have benefits to education in the long run.



INTRODUCTION

Use of technology has become a common phenomenon in our daily life. Applications of nowadays technology are diversified and expanding. Practically, all sectors of economy and in the society-at-large utilize available technology productively and it is expected that the more advances technology achieves, the wider the magnitude and scope of its utilization. Academic institutions are no exception, as there are many facets of modern technology in use. Such includes, but not limited to: use of smart classrooms, PowerPoint presentations, preparation and saving of electronic course and official materials. Many tools are utilized to enhance communication among all members of a given college or university, among which is that between teachers and their students. These include, among others, establishing of sites for discussion groups and the use of blackboard. However, one of the most widely used means of communication in academia is the e-mail system – especially for disseminating information to its community and for receiving feedback. E-mail has been reported to be a beneficial tool in education. A conceptual framework for integrating e-mail in a variety of courses for independent learning situations was illustrated some years ago (Hassett et al., 1995). More reports on uses of the e-mail system in academia have emerged ever since (Campbell & Lom, 2006; Hu, 2006; Weiss & Hanson-Baldauf, 2008). It is believed that the use of e-mail can enhance communication between faculty members and their students

63 (Forrest; Hannon) and, thus, enhances the education process (Weiss & Hanson-Baldauf,
64 2008).

65 University students would be expected to be self-learners and should be encouraged to
66 be such. While educators strive to achieve the set student learning objectives for the courses
67 they teach, they also are expected to play a significant role in the personality and professional
68 development process of their students. Encouragement of students to be self-learners is
69 practiced by all teachers, for which creative teaching approaches are devised. Among the
70 instruments that are used relative to self and engaged-learning in many of the courses that the
71 author of this paper has taught is the use of e-mail for communicating with students over the
72 past 5 years. This article is concerned with the quantitative and qualitative assessment of this
73 experience. It describes the setting where the use of e-mail was applied and the fashion in
74 which it was used. Also, detailed categorization of instructor-generated e-mail messages and
75 those received from students are reported herein. Student assessment of the use of e-mail in
76 teaching activities and the perceived benefits from the instructor's view are presented in this
77 paper.

78 METHODS

79 Academic setting

80 This study and the expressed experience involve the College for Women (CFW) at
81 Kuwait University, Kuwait. It is the latest established among all colleges of Kuwait
82 University, started offering courses in September 2003 (El-Sabban, 2008). One of the main
83 objectives of CFW is to graduate females who are self-learners and would be independent
84 thinkers to meet their challenges in the future. The curricula being offered at CFW follow the
85 outcome-based learning system, in which continuous evaluation of academic programs are
86 carried out, for any modifications and/or improvements necessary. Such a system is
87 instrumental in approval/accreditation of these academic programs by noted educational

88 and/or professional entities. Currently, the student body is about 2000 and the language of
89 instruction at the CFW is English.

90 **Students and classes**

91 Students at the CFW are all females; most of them are high school graduates and
92 those who are admitted must have a background in sciences. The language of instruction in
93 the governmental pre-college educational system in the State of Kuwait is Arabic, but some
94 students may have had previous exposure to instruction in English. Upon admission, students
95 must pass a number of English language courses. On average, students start this stage of their
96 education at about 18 years of age.

97 **Offered courses**

98 A wide spectrum of courses is offered by the different departments at CFW. Some
99 courses are of what is known as the General College Education Domain, usually introductory
100 and diverse. Others are offered to those students who have chosen a certain major of study,
101 for which they complete courses of that certain academic program towards the B.Sc. degree.
102 Teachers at CFW may teach courses that are of college-wide nature and in their respective
103 disciplines. Class size normally ranges between 15 and 20 students, but some classes have up
104 to 30 students in courses that the majority of students have to take to satisfy certain program
105 requirements.

106 **Courses involved**

107 E-mail was used in courses that were taught by the same instructor, the author, in the
108 undergraduate nutrition curriculum. Some of these courses were science-oriented that
109 included: Biology (CFW 104), Anatomy and Physiology (FSC 303), Public Health Nutrition
110 (FSC 320) and Capstone Project (FSC 499). Other courses of academic programs included
111 those that are designed for personality and professional development as future nutritionists,

112 namely: Ethics and Practices (CFW 130) and Career Perspectives (CFW 260). The author
 113 taught these courses several times during the past 5 years.

114 **Way of e-mail use**

115 For the course instructor to have constant communication with students, an e-mail
 116 account is established specifically for each course. Students are provided with the name of
 117 the e-mail account and with an easy password that all enrolled students can remember. The
 118 main purpose of this course-specific e-mail account is for the instructor to disseminate all
 119 relevant information, announcements and document files containing handouts. Students are
 120 informed of this e-mail and its main purpose as they begin the semester. They are clearly
 121 advised not to use this e-mail for communicating with the course instructor or to use it to
 122 communicate with each other. For a student who wishes to communicate with the course
 123 instructor, the advice is to use her own personal e-mail account and to send any messages to
 124 any of the instructor's professional and personal e-mail accounts. This is by design, so that
 125 the course-specific e-mail account would not be cluttered with many intersecting messages by
 126 students that may be confusing to students in the long-run. However, students are permitted
 127 only to forward any of the messages in the inbox compartment to their respective e-mail
 128 accounts for individual utilization. Students were also advised not to delete any of the inbox
 129 messages, so that all messages from the course instructor would always be available to all and
 130 would constitute an accumulated set for a particular course. Students are advised constantly
 131 to check the course e-mail for any incoming messages. Even though this was practiced, the
 132 course instructor alerted students to messages of significant information in the classroom.

133 **The e-mail study**

134 E-mail messages that were sent by the course instructor and those that were received
 135 from students during the period between the Fall Semester of 2008 to the Summer Session of
 136 2013 were retrieved from various accounts. All messages were printed, reviewed and then

categorized for purpose. Complete sets of e-mail messages sent by the course instructor were kept as records. A sum of 1364 messages was counted: 644 for science courses and 720 for non-science courses. Available messages from students to the course instructor were saved for analysis according to purpose accounted for a total of 1720. It should be noted that because of two e- hacking mishaps of the instructor's e-mail accounts in 2010, an estimated number of 600-700 messages from students were lost. However, it is felt that the number of retrieved messages is sufficient for analysis.

It was of interest to learn about what students think about their experience of using e-mail for instructor-student communication in teaching activities. For this purpose, a simple 15-statement questionnaire was constructed, to which students would respond to. Also, students were given the opportunity to make any comments they have on the use of e mail as a means of communication. At the end of each semester, students of each course responded to the questionnaire and the resultant data were recorded. Out of a total number of students of 416, 349 responses were obtained – a response rate of 84%. 

RESULTS

Categories and percentages of e-mail messages sent to students by the course instructor are shown in Table 1. Such are organized in a descending order based on the overall percent weight of each category. Message related to teaching activities accounted for 95% of the instructor's messages, while the remainder (5%) related to the "greetings" category. The highest overall percentage of these messages (27.5) belonged to the category in which handouts and syllabi were attached. Categories, sub-categories and percentages of e-mail messages received from students are presented in Table 2. Assignment-related and non-assignment related messages accounted for 40.2 and 59.8%, respectively. Sub-categories are organized in a descending order, based on their percentages within each category.

PLEASE INSERT TABLES 1 AND 2 HERE 

Results of student assessment of the use of e-mail in teaching activities are shown in Table 3, as numbers and percentages of a total of 349 responses. Data showed that the majority of students felt that use of e-mail was a convenient and fast means for communication, its use saves time, a preferred way to communicate with instructor, felt informed and provided, and were satisfied with the instructor's responses and response rate to their messages. However, most students assessed that the use of e-mail is not as efficient as face-to-face communication with instructor and would prefer to discuss course-related matters with the instructor in person. The majority of students felt encouraged to communicate with instructors by e-mail and would recommend this means of communication in future courses. A total of 73 students made comments, accounting to 20.9% of all respondents. Comments on some aspects of the use of e-mail amounted to 38.4% and the remainder were varied. Collectively, comments centered on complimenting the way e-mail was used, expressed preference for face-to-face communication and conveyed the wish that "blackboard" be implemented, as another available technology to be used.

PLEASE INSERT TABLES 3 AND 4 HERE

DISCUSSION

Use of modern technology is widespread and involves practically all sectors of any society, thus it would be impossible to numerate. The educational process involves communication, to which modern technology provides effective and fast means that are beneficial to education at all levels. Many tools are utilized to enhance communication among members of a given college or university. These include, among many, the establishing of sites for discussion groups and to the largest extent the use of the e-mail system for disseminating information to the academic community and for receiving feedback. Sound scientific literature, based on well-planned studies and analysis on applications of technology numerated some of the benefits in communication and in aspects of teaching and

quality of student work and comprehension (Hannon; Jones, 2002; Winder). A study found that students are early adopters and heavy users of the internet and students related that the internet has enhanced their education and also changed their social life (Winder). Means of integrating technology with teaching and learning are evaluated and applied (Nix et al, 2004) and reports on the use of technology for communicating scientific research started to appear in the literature (Campbell & Lom, 2006; Ruble & Lom, 2008; Selwyn & Robson, 1998; Watson & Lom, 2008). Educationalists are urging for incorporation of technology to change means of teaching and to empower students with skills (Riedel).

The most common electronic means of communication among individuals in our present day life is the e-mail system. The use of e-mail on campuses is widespread and many colleges and universities provide their students with e-mail accounts. Universities have policies and guidelines for using their e-mail system in general (Kuwait University; Rutgers University), for use by students (John Carroll University; Pennsylvania State University), and for communication with students (Marquette University; University of South Australia). Different electronic communication means, including e-mail, are taught to students for better and more effective communication (Mahrajan & Ross). Some academic institutions urge faculty members to encourage their students to use the e-mail system (Western Washington University). Reports on uses of the e-mail system in academia started to emerge a few years back and continue to appear in the literature (Campbell & Lom, 2006; Hu, 2006; Weiss & Hanson-Baldauf, 2008). It is believed that the use of e-mail can enhance communication between faculty members and their students (Forrest; Hannon) thus, enhance the education process (Weiss & Hanson-Baldauf, 2008).

As communication via e-mail in academia is multi-directional, its use by all individuals concerned is heavy. As a result, analyzing patterns of communication among students by e-mail on campus caught the interest of business entities (Nagel). Also, private

enterprises offer training and workshops for students to learn the etiquette of communicating by e-mail (Serebra Learning Corporation). Communication by e-mail in educational activities has been the subject of a few reports (Hu, 2006; Indiana University). The use of e-mail as an educational feedback tool is urged (Huett). Faculty members are using the latest technology in communicating better with their students (Kovac) and this enhanced level of communication can be conducive of increased student participation (Hannon). Specifying hours by teachers to communicate with students, in a fashion similar to office hours, is currently being practiced (Riedel). Teachers can be educated about the etiquette of using the e-mail in communicating with students, for a favorable academic environment that would be encouraging for participation and learning (Purdue University). Recently, the term “netiquette” was introduced for proper communication (Wikipedia). As effective communication among students and their teachers is instrumental in quality education, the e-mail can be viewed as a very useful tool in the education process and institutions of higher learning ought to enhance its utilization.

Studies on the e-mail messages that students write to their teacher explored several aspects. A study identified the main reasons that students use e-mail to interact with their teachers as follows: to clarify course material and procedures, as a means of efficient communication, and for personal and social reasons (Waldeck et al., 2001). Use of e-mail by students was significantly different among students of different cultural backgrounds in the South Pacific (Frank and Toland, 2002). Native English speakers demonstrated greater resources in creating e-polite messages to their professors than non-native speakers (Biesenback-Locas, 2007). Saudi Arabian female students used politeness strategies in their e-mail requests from their professors (Bulut and Rabab’ah, 2007). Purposes for students to write e-mail messages to their instructors were mostly for different requests (Chalak et al. 2010). Differences in the nature of e-mail messages between American and Iranian students

were observed. American students demonstrated more personal and social messages, while Iranian students used more greetings and closing protocols in theirs (Samar et al., 2010).

This study evaluates the experience of using e-mail in teaching activities at the College for Women, Kuwait University, over the last 5 years. As shown in Table 1, most of the instructor e-mail messages (95%) centered about course work and 5% involved greetings to students – a gesture of cordiality and courtesy. In a study, content analysis of e-mail exchanges revealed that 98% of messages revolved around course teaching matters and 2% were administrative-type (Hassini, 2006). The study herein showed that students wrote e-mail messages to their instructor for many purposes (Table 2), which were categorized as assignment-related (40.2%) and non-assignment related (59.8%). In contrast to the categories and sub-categories presented, another study showed that 33.2% of exchanged messages were assignment-related, 25.8% were project-generated, 20.8% were related to marks, and midterms and final exams generated 11.5% (Hassini, 2006). Gestures of courtesy and politeness exhibited by students were evident, as they apologized for late submission of assignments (6.4%), apologized for being absent from class (5.8%) and sent greetings and thank you notes (8.7%) of their total messages. Additionally, 26% of students who commented on the use of e-mail survey expressed their thanks (Table 4) to the instructor. This aspect can be viewed as similar in politeness exhibited by Saudi Arabian female students, which characterizes the culture of this region.

As noted in Table 3, students revealed a satisfactory level of acceptance for the use of e-mail in teaching activities as being implemented. It is noted that while this computer-mediated means of communication was accepted by the majority of students, a face-to-face communication was most preferred and desired. This aspect accounted for 23.3% of the comments made by some of the students who responded to this study questionnaire (Table 4), while 8.2% indicated the wish to use blackboard in teaching activities.

As teaching-related communication involves both the instructor and the student sides, the teacher's view is to be taken into consideration. This instructor, the author of this paper, perceives the following as advantages of use of e-mail in teaching activities: 1) flexibility in time of opening the e-mail for any time access, 2) messages remain permanent for future and frequent accessing, 3) students receive information while being away from the classroom, 4) students read messages and be aware of important announcements - a matter that makes them active learners, 5) handouts and course materials contained in attachments to messages can be printed as appropriate, 6) the copying of course materials and handouts by instructors can be spared - with attained economic benefits, 7) communicating with the course instructor about any sent information or materials and at any time, 8) cordial and encouraging messages from the instructor can be motivating to students, and 9) enhancement of use of technology by instructors and students.

CONCLUDING REMARKS

This article relates the author's experience with using the e-mail system in a variety of courses he has taught at the College for Women, Kuwait University, over a 5-year span. The e-mail was used in a particular way, which adds to the variety of e-mail uses reported in the literature. The reported break down of messages generated by the instructor and of those received from students provides analytical information of patterns and contrast of use, thus enriching the literature further. Use of available technology in academia ought to be prevalent and with emphasis on instructor-student communication. It is assessed that this experience has been very pleasing and satisfying. It must be stressed that using the e-mail in teaching activities can be a means for motivating students to learn and to feel comfortable in their academic environment. When communicating with students, it is essential for the instructor to be attentive to student messages, respond to them all as quickly as possible, and observe "netiquette" as a regular feature. While designated office hours are very useful in face-to-face

relating about course matters and student needs, some female students may feel shy to utilize such. Thus, the e-mail system can be the best alternative to the person-to-person communication in this regard. Perhaps, the idea of having e-mail hours within the academic week, in addition to set office hours, can further facilitate instructor-student communication – however, such needs to be thoroughly evaluated. This instructor recommends the use of e-mail and/or any other computer-mediated means of communication in academia, for all the overall benefits to education that can be attained.

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Table 1- Categories and percentages of e-mail messages sent by the course instructor

Category	Science (N)	Science (%)	Non-science (N)	Non-science (%)	Overall (N)	Overall (%)
Handouts & Syllabi	150	23.5	224	31.1	374	27.5
Notices / Reminders	142	22.0	137	19.0	279	20.5
Assignment-related	102	15.8	176	24.4	278	20.4
Materials of Interest	154	23.9	99	13.8	253	18.5
Greetings	37	5.7	38	5.3	75	5.4
Examination-related	35	5.4	31	4.3	66	4.8

Visit / Field Trip-related	24	3.7	15	2.1	39	2.9
Total	644	100	720	100	1364	100

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413 Table 2- Categories, sub-categories and percentages of e-mail messages received from students

Category / Sub-category	(N)	(%) In category	(%) Of total
Assignment-related			
Request postponement of deadline	256	37.0	14.9
Sending assignments as attachments	238	34.4	13.9
Apology for late submission of assignments	110	15.9	6.4
Inquiry about assignments	88	12.7	5.1
Total for this category	692	100	40.2
Non-assignment related			
Requests for: appointments / help / supporting materials	293	28.5	17.0
Examination-related	207	20.1	12.0
Sharing of information	158	15.4	9.2
Greetings / thank you	150	14.6	8.7
From class representatives / about field trips	121	11.8	7.0
Apology for being absent	99	9.6	5.8
Total for this category	1028	100	59.8

Total of all messages	1720		100
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Table 3- Student evaluation of communication via e-mail (N = 349)

Statement	Agree N (%)	No opinion N (%)	Dis- agree N (%)
1- E-mail is a convenient method of communication for the course	327 (93.7)	6 (1.5)	16 (4.6)
2- I prefer to use the e-mail to communicate with my instructor	289 (82.8)	15 (4.3)	45 (12.9)
3- This method made me feel fully-informed and provided	291 (83.4)	33 (9.4)	25 (7.2)
4- My instructor always responded back to my e-mails	286 (81.9)	47 (13.5)	16 (4.6)
5- I feel that e-mail is as efficient as face-to-face communication	128 (36.7)	65 (18.6)	156 (44.7)
6- I feel that communicating by e-mail saves me time	324 (92.8)	12 (3.5)	13 (3.7)
7- I use the e-mail because it is faster to reach my instructor	289 (82.8)	26 (7.4)	34 (9.8)
8- I like the idea that I can communicate with my instructor at any time and place	319 (91.4)	21 (6.0)	9 (2.6)
9- I feel satisfied about my instructor's responses to my e-mails	281 (80.5)	54 (15.5)	14 (4.0)
10- I like e-mailing more than talking to my instructor face-to-face	93 (26.6)	81 (23.1)	175 (50.3)
11- I feel that my instructor is more accessible by e-mail	164 (47.0)	122 (35.0)	63 (18.0)

12- I prefer to talk to my instructor rather than e-mailing him/her	191 (54.7)	80 (22.9)	78 (22.4)
13- I like communicating with my instructor because he/she always answers me back	224 (64.2)	82 (23.5)	43 (12.3)
14- I will always use the e-mail to communicate with my instructors	206 (59.0)	72 (20.6)	71 (20.4)
15- I would recommend communication by e-mail for all my courses in the future	259 (74.2)	52 (14.9)	38 (10.9)

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431 Table 4– Summary of comments received from students

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Category	N	% In category	% Of total
Comments on e-mail use			
E-mail made work much faster and easier	11	39.3	15.1
E-mail is good, but not sorted to follow easily	7	25.0	9.6
I prefer e-mail for better communication	5	17.9	6.8
E-mail is good because I re-read instructor response	3	10.7	4.1
I use e-mail for quick questions	2	7.1	2.7
Total for this category	28	100.0	38.4
Other comments			
Thank you	19	42.2	26.0
I prefer face-to-face	17	37.8	23.3
Blackboard is also convenient	6	13.3	8.2
I prefer online chat	3	6.7	4.1
Total for this category	45	100.0	61.6
Total comments	73		100
% of total responses [(73/349)*100]	20.9		

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