

No.	Item	Mean	S. D.	Percent	Attitude
	<b>Total</b>	3.67	0.76	73.4	Positive

**Table (3)**

Analysis of item 30 in terms of internet accessibility from home.

Variables	Levels	Frequencies	Percent
Item 30: I have internet access from home	1: SD	17	23.3
	2: D	6	8.2
	3: U	3	4.1
	4: A	6	8.2
	5: SA	41	56.2
	<b>Total</b>	73	100 %
	<b>Mean</b>	<b>S. D.</b>	<b>Percent</b>
	2.34	1.72	46.8

**Table (4)**

Analysis of item (41) of internet accessibility from university.

	Levels	Frequencies	Percent
Item 41: I have access to internet from University	1: SD	13	17.8
	2: D	8	11.0
	3: U	0	0
	4: A	11	15.1
	5: SA	41	56.2
	<b>Total</b>	73	100 %
	<b>Mean</b>	<b>S. D.</b>	<b>Percent</b>
	2.19	1.61	43.8

No.	Item	Mean	S. D.	Percent	Attitude
25	The BL content encouraged me to learn.	4.11	1.01	82.2	Positive
28	BL activities gave me the chance to read, give opinion, and interact with other students on topics related to the material.	4.07	0.98	81.4	Positive
22	The online videos allowed us to listen to native speakers.	4.04	0.93	80.8	Positive
20	The discussion forums increased my writing abilities.	3.95	0.97	78.9	Positive
19	Using visual aids with Blended learning made learning English interesting.	3.93	1.11	78.6	Positive
14	BL gave me the chance to learn English through discussion forums.	3.92	1.09	78.4	Positive
23	The discussion forums were interesting.	3.82	1.11	76.4	Positive
15	listening and commenting on podcasts.	3.67	1.26	73.4	Positive
17	getting engaged in error analysis exercises.	3.67	1.34	73.4	Positive
16	watching videos and getting engaged in discussion forums.	3.59	1.14	71.8	Positive
18	doing an online quiz.	3.14	1.44	62.7	Positive
21	The videos uploaded on the forums were boring.	1.63	1.34	32.6	Negative
24	The discussion forums didn't encourage me to interact with my classmates.	1.59	1.28	31.8	Negative
<b>Total</b>		3.84	0.66	76.8	Positive

**Table (15)**

Means, standard deviations, and percentages for the students' attitudes towards ease of use of computers and OCC.

No.	Item	Mean	S. D.	Percent	Attitude
34	The OCC was easy to use.	4.10	1.07	81.9	Positive
32	The instructions provided on the OCC were easy to follow.	4.04	0.86	80.8	Positive
38	I was able to learn OCC techniques quickly.	4.01	1.11	80.3	Positive
36	The OCC helped me to use internet effectively.	3.88	1.05	77.5	Positive
39	The OCC allowed me to use different computer programs.	3.68	1.19	73.7	Positive
31	The OCC improved my computer skills.	3.52	1.29	70.4	Positive
40	The OCC helped me manage computer technical problems.	3.52	1.11	70.4	Positive
33	I got scared when I operated BL techniques on OCC.	2.26	1.37	45.2	Negative
37	I felt my knowledge regarding using OCC was limited compared to my peers.	1.84	1.44	36.8	Negative
29	I hated using the OCC environment.	1.23	1.25	24.6	Negative
35	The OCC was complicated.	1.05	1.25	21	Negative

## Appendix:

### *The Questionnaire items as analyzed in the study:*

**Table (13)**  
Means, standard deviations, and percentages for the attitudes  
towards the blended learning process.

No.	Item	Mean	S. D.	Percent	Attitude
6	Applying BL for English courses enhanced the chance for interaction with the teacher.	4.18	0.86	83.6	Positive
3	Applying BL in teaching the English course helped me improve all my skills (writing, reading, listening, speaking).	4.07	0.87	81.4	Positive
12	By applying BL for English courses, the chance of interaction with my classmates was enhanced.	3.90	1.12	78.1	Positive
5	The technique of BL (OCC) encouraged me to learn.	3.88	1.03	77.5	Positive
1	I am in favor of applying BL to English courses	3.85	1.23	77.0	Positive
2	Applying BL in teaching the English course made me like English and more interested in English	3.85	0.92	77.0	Positive
4	I found the English course easier when applying BL in teaching.	3.84	0.99	76.7	Positive
9	Blended learning helped me learn better.	3.75	1.10	75.1	Positive
10	Applying BL for English courses was more delightful and relaxing than traditional methods.	3.51	1.30	70.1	Positive
7	I enjoyed talking with others about BL.	3.40	1.19	67.9	Positive
8	I don't want to take part in this BL process again.	1.26	1.24	25.2	Negative
11	BL was a waste of time.	1.15	1.25	23	Negative
<b>Total</b>		3.82	0.80	76.3	Positive

**Table (14)**

Means , standard deviations, and percentages for the students attitudes toward BL content.

No.	Item	Mean	S. D.	Percent	Attitude
27	The online activities on the OCC were related to the course objectives (ILOs) .	4.48	0.63	89.6	Positive
26	The online activities were not long.	4.14	0.79	82.7	Positive
13	With BL, I could listen to videos more than once to improve my pronunciation.	4.11	1.11	82.2	Positive

22. Norton, S. & Irvin, J. (2007) . “Developing positive attitudes towards algebra. *Mathematics: Essential Research*”, *Essential Practice* 2, 561- 570
23. Osguthorpe, R. T., and Graham, C. R. (2003) . “Blended Learning Systems: Definitions and Directions.” *Quarterly Review of Distance Education*,4 (3) , 227- 234.
24. Rovai, A.P., & Jordan, H.M. (2004, August) . “Blended learning and sense of community: A comparative analysis with traditional and fully online graduate courses”. *International Review of Research in Open and Distance Learning*, 5 (2) . Retrieved March 17, 2005 from <http://www.irrodl.org/content/v5.2/rovai-jordan.html>
25. Sankaran, S. R., Sankaran, D., & Bui, T. (2000) . “Effect of student attitude to course format of learning performance: An empirical study in web vs. lecture instruction”. *Journal of Instructional Psychology*, 27, 66–73
26. Sauers, D., & Walker, R. C. (2004) . “A comparison of traditional and technology- assisted instructional methods in the business communication classroom.” *Business Communication, Quarterly*, 67, 430–442.
27. Singh, H. (2003) .” *Building Effective Blended Learning Programs*”, *Educational Technology*, 43, 51- 54.
28. Singh, H. and Reed, C., (2001) . *A White Paper: Achieving Success with Blended Learning*, Centra Software.
29. Usta, E. (2007) “*Harmanlanmış Öğrenme ve Çevrimiçi Öğrenme Ortamlarının Akademik Başarı ve Doyuma Etkisi.*” *Yayınlanmamış Doktora Tezi*, Ankara: Gazi Üniversitesi Eğitim Bilimleri Enstitüsü.
30. Vamosi, A. R., Pierce, B. G., & Slotkin, M. H. (2004) . “Distance learning in an accounting principles course—Student satisfaction and perceptions of efficacy”. *Journal of Education for Business*, 79, 360–366.
31. Wu, D. & Hiltz, S. R. (2004) . “Predicting learning from asynchronous online discussions.” *Journal of Asynchronous Learning Networks*. 8 (2) ,139- 151.
32. Yukselturk, E., & Top, E. (2005–2006) . “Reconsidering online course discussions: A case study”. *Journal of Educational Technology Systems*, 34 (3) , 341–367.

12. Dziuban, C. D., Hartman, J. L., & Moskal, P. D. (2004) . “Blended learning.” Education Center for Applied Research, Research Bulletin, 7.
13. Garrison, D. R. & Kanuka, H. (2004) . “Blended Learning: Uncovering its Transformative Potential in Higher Education”. The Internet and Higher Education, 7 (2) , 95- 105.
14. Graham, C. R. (2005) . ‘Blended learning systems: Definition, current trends, and future directions. ‘ In C. J. Bonk & C. R. Graham (Eds.) . Handbook of blended learning: Global perspectives, local designs. San Francisco, CA: Pfeiffer Publishing.
15. Heckman, R., & Annabi, H. (2005) . “A content analytic comparison of learning processes in online and face- to- face case study discussions”. Journal of Computer- Mediated Communication, 10 (2) article 7. Retrieved January 4, 2007, from <http://jcmc.indiana.edu/vol10/issue2/heckman.html>
16. Humbert, J. & Vignare, K. (2005) . RIT introduces blended learning—successfully! . In J. C. Moore (ed.) , “Elements of Quality Online Education: Engaging Communities, Wisdom from the Sloan Consortium”, The Wisdom Series, (2) . Needham, MA: Sloan- C.
17. Hwang, A., & Arbaugh, J. B. (2006) . “Virtual and traditional feedback-seeking behaviors: Underlying competitive attitudes and consequent grade performance.” Decision Sciences Journal of Innovative Education, 4, 1–28.
18. Johnson, J. (2002) . “Reflections on teaching a large enrollment course using a hybrid format”. Teaching with Technology Today, 8 (6).
19. Klein, H. J., Noe, R. A., & Wang, C. (2006) . “Motivation to learn and course outcomes: The impact of delivery mode, learning goal orientation, and perceived barriers and enablers”. Personnel Psychology, 59, 665–702.
20. Munro, R. & Munro, E. (2004) , “Learning styles, teaching approaches and technology”, The journal for quality and Participation, 27 (1) , p.26
21. NORTHROP, P. (2001) . “A framework for designing interactivity in web based instruction”. Educational Technology, 41 (2) , 31 – 39.

## *References:*

1. Akkoyunlu, B., & Yilmaz Soylu, M. (2006) . “A study on students’ views on blended learning environment.” *Turkish Online Journal of Distance Education*, 7 (3) , 43- 56.
2. BALCI, Meric & SORAN, Haluk (2009) . “Students opinions on blended learning”. *Turkish Online Journal of Distance Education- TOJDE* (10) 1, 43- 56
3. Barenfanger, O. (2005) . “Learning management: A new approach to structuring hybrid learning arrangements”. *Electronic Journal of Foreign Language Teaching*, 14- 35.
4. Bersin, J. (2004) . *The blended learning book. Best practices, proven methodologies and lessons learnt.* San Francisco: Pfeiffer.
5. Bieber, M., Engelbart, D., Furuta, R., Hiltz, S.R., Noll, J., Preece, J., Stohr, E., Turoff, M., Van de Walle, B. (2002) . “Toward virtual community knowledge evolution”. *Journal of Management Information Systems*, 18 (4) , 11- 35.
6. Brown, R. (2003) . “Blending learning: Rich experiences from a rich picture.” *Training and Development in Australia*, 30 (3) , 14- 17.
7. Burgon, H., & Williams, D. (2003) . “Bringing off- campus students on campus: An evaluation of a blended course”. *The Quarterly Review of Distance Education*, 4 (3) , 253- 260.
8. Cappel, J. J., & Hayen, R. L. (2004) . “Evaluating e- learning: A case study.” *Journal of Computer Information Systems*, 44 (4) , 49–56.
9. Christensen, T. K. (2003) . “Finding the balance: Constructivist pedagogy in a blended course”. *The Quarterly Review of Distance Education*. 4 (3) , 235- 243.
10. Cottrell, D.M. & Robinson, R.A. (2003) . “Blended learning in an accounting course.” *The Quarterly Review of Distance Education*, 4 (3), 261- 269.
11. Duff, P.A. & Uchida, Y. (1997) . “The negotiation of teachers’ sociocultural studies and practices in postsecondary EFL classrooms.” *TESOL Quarterly*, 451- 486.

OCC in a medium level of frequency showed favorable attitudes of blended learning. The bottom line is that the frequency of participation really affected the attitudes positively and the students' who showed positive attitudes had high achievement level.

### **Recommendations:**

Finally, the findings of this study pave the way for further research to venture into the effect or correlation between the frequencies of online participation and achievement level when blended learning is the learning platform. Moreover, more research should be done to delimit the differences in the frequencies of participation when the synchronous and asynchronous approaches to blended learning are compared.

## Conclusion:

This study was important in the sense that it revealed the students' attitudes towards BL process, ease of use and OCC ease of use. The results revealed that overall mean score for students' views for all the domains on blended learning environment is 75.7%. There were significant differences in terms of their positive attitudes due to the frequency of online participation in favor of the high and medium frequencies. Similarly, there was a direct correlation between the students' positive attitudes and their achievement level.

In general, the high frequency of online participation resulted in a significant rise in the students' positive attitudes. This could be due to the flexibility of the adopted asynchronous approach of blended learning (Christensen, 2003; Burgon and Williams, 2003). Many students reported that their learning increased due to adopting the asynchronous approach. This could be one of the reasons why the students expressed their positive views. It is believed that the asynchronous approach to blended learning is better than the synchronous tools in enhancing knowledge construction (Bieber et al., 2002). This could be one of the reasons why the students' frequency of participation and achievement level increased in relation to their positive views towards the blended component.

The students' achievement levels and their frequencies of online participation to the forum affected their views about blended learning environment. The students who participated more (5- 16 tasks) developed more positive stands than those who had low frequencies of participation (1- 4 tasks). This leads us to the conclusion that the more the students are exposed to the online material the more they enjoyed the whole process of blended learning.

Moreover, the students who less frequently used blended learning also expressed their positive attitudes. There were also significant differences in their positive attitudes in terms of: the high frequencies as compared to the medium frequencies; the high frequencies as compared to low frequencies of online participation. As for the low and medium frequencies, there were no significant differences in the students' attitudes. After all, the students who did not use blended learning so much (low level) and those who used the



read, comment, listen and watch as part of integrating all language skills in communication.

**Hypothesis (4) :**

There are no significant differences in the students' attitudes towards the ease of use of the OCC due to the frequencies of participation.

**Table (14)**

The results of the Post Hoc Multiple comparisons (LSD (test of the students' attitudes towards the ease of use of the OCC due to the frequency of participation.

N. of Times	Low	Medium	High
Low			
Medium	0.51 *		
High	0.83 *	0.33	

Significant at ( $\alpha= 0.05$ ) .

*The table indicates that there are significant differences in the students' attitudes towards the ease of use of the OCC due to the frequency of online participation in between:*

- ◆ high and low frequencies of participation in favor of high frequency.
- ◆ medium and low frequencies of participation in favor of medium frequency.
- ◆ There were no significant differences in the students' positive attitudes between the high and medium frequencies of participation.

The results reveal that the positive stands increase when the students' participation is medium or high (Hwang & Arbaugh, 2006) . The students' rising frequencies of online participation as related to their positive views towards BL could be due to the fact that the online communication increases when the course content is uploaded online (Johnson, 2002) . Therefore, blended learning is the motivating factor for such high frequencies affecting the positive stands.

Yet, there seems to be no significant difference between the medium and high frequencies in terms of the positive attitudes. This suggests that the students who answered (5- 16) online tasks expressed positive attitudes towards blended learning without any significant differences.

- ◆ There are no significant differences in the students' positive attitudes between the medium and low frequencies of participation.

The students' high frequencies of online participation positively affected their positive attitudes. The following table clarifies the students' attitudes towards the *BL content* (the item No. 27) in the questionnaire:

**Table (12)**

Means, standard deviations, and percentages for the students attitudes toward BL content.

No.	Item	Mean	S. D.	Percent	Attitude
27	The online activities on the OCC were related to the course objectives (ILOs) .	4.48	0.63	89.6	Positive

This item reveals that 89.6 % of the students indicated that the online material was related to the ILOs of the course. This could be one reason why online frequencies of participation and attitudes were highly positive. This finding affirms what Humbert and Vignare (2005) argued in their study on the students' views towards blended learning. They found that the students liked the approach and that their communication with other students increased due to blended learning. Therefore, the high frequency of online participation could be due to the short tasks, the way content allowed for more student-to- student interaction as clarified in the following items of the BL content questionnaire:

**Table (13)**

Means, standard deviations, and percentages for the students attitudes toward BL content.

No.	Item	Mean	S. D.	Percent	Attitude
26	The online activities were not long.	4.14	0.79	82.7	Positive
25	The BL content encouraged me to learn.	4.11	1.01	82.2	Positive
28	BL activities gave me the chance to read, give opinion, and interact with other students on topics related to the material.	4.07	0.98	81.4	Positive

It is no wonder then that the more they participated, the more they liked the blended learning approach. This means that the students are in need of more practice and communication when they are taught a second language and the blended environment is the best learning platform.

It could be suggested that the students who participated online had greater sense of community (Rovai & Jordan, 2004) and their positive views indicated that students preferred environments as such. They need to see,

**Table (10)**

Means, standard deviations, and percentages for the students attitudes toward BL process

No.	Item	Mean	S. D.	Percent	Attitude
6	Applying BL for English courses enhanced the chance for interaction with the teacher.	4.18	0.86	83.6	Positive

This table shows that 83.6 % of the students indicated that blended learning enhanced interaction with the teacher. It could be that they liked the flexible online communication with the teacher and due to that their frequency of online participation improved and affected their positive attitudes. The students informed their teacher that after engaging in more tasks, they came to know the value of blended learning. In the current study, the number of students participating in the first task was only 24, and the number increased to include all the students after uploading the second task. The students' increasing frequency of using the online component might be because the OCC environment was easy to follow and the tasks were not lengthened. Moreover, the teacher used to send motivating terms such as «good job, keep up with the good work».

**Hypothesis (3) :**

There are no significant differences in the students' attitudes towards the blended learning content due to the frequencies of participation.

**Table (11)**

The results of the Post Hoc Multiple comparisons (LSD) test of the students attitudes towards the BL content due to the frequency of participation.

N. of Times	Low	Medium	High
Low			
Medium	0.18		
High	0.77 *	0.60 *	

Significant at ( $\alpha= 0.05$ ) .

*The table indicates that there are significant differences in the students' attitudes towards the BL content due to the frequency of participation (Akkoyunlu and Soyulu, 2006) between:*

- ◆ high and low frequencies of participation in favor of high frequencies.
- ◆ high and medium frequencies of participation in favor of high frequencies.

learning goals motivated them to participate and positively affected their positive stands towards blended learning (Klein et al., 2006) .

- ◆ There are significant differences in the total degree of the attitudes between the high and medium frequencies in favor of high frequencies. This means that the students' rising frequencies of participation positively affected their total attitudinal stands. This confirms that the researcher's logical timing of giving the students' the post- course survey since it could give a more objective assessment of the students' overall attitudes (Vamosi et al., 2004) .
- ◆ There are no significant differences in the positive attitudes between the medium and low frequencies of online participation. This means that in general the students whose participation frequency ranged between (0-9) had no significant differences in their positive views.

### Hypothesis 2:

There are no significant differences in the students' attitudes towards the first domain of the BL process due to the frequency of participation.

**Table (9)**

The results of the Post Hoc Multiple comparisons (LSD) test of the students attitudes towards the BL process due to the frequency of participation.

N. of Times	Low	Medium	High
Low			
Medium	0.21		
High	0.68 *	0.47	

Significant at ( $\alpha= 0.05$ ) .

The table indicates that there are significant differences in the students' positive attitudes towards the BL process due to the frequency of participation between high and low frequencies in favor of high. This adds to the aforementioned finding stating that students who participated more had more positive stands (Akkoyunlu and Soylu, 2006; Hwang and Arbaugh 2006) . This indicates that as the students engaged more in on- line tasks, their positive attitudes significantly increased. Their increasing frequency of online participation could be due to their satisfaction with the blended learning process because in item (No. 6) of the questionnaire in the part related to the BL process, they indicated that their interaction with the teacher increased and it seemed that they liked such mode of interaction. The following table clarifies the point:

Domain		Sum of Squares	df	Mean Square	F	Sig.
Total	Between Groups	4.73	2	2.37	5.74	0.005*
	Within Groups	28.85	70	0.41		
	<b>Total</b>	33.58	72			

\* significant at ( $\alpha=0.05$ )

It is evident according to the aforementioned table that the significant value is less than (0.05) in the three domains and the total degree of the attitudes. Accordingly, there are significant differences in the students' positive attitudes due to their frequency of participation in the OCC. This finding goes in line with that of other researchers as they found that students who participated more in the discussion forums had more positive attitudes towards blended learning (Akkoyunlu and Soylu, 2006; Hwang and Arbaugh, 2006).

To delimit the differences between the three levels of frequency of participation (high, medium and low), the test of the *Post Hoc Multiple comparisons* (LSD) was used and the results were set as follows:

**Table (8)**

The results of the test of Post Hoc Multiple comparisons (LSD) of the total degree of attitudes due to the frequency of participation.

N. of Times	Low	Medium	High
Low			
Medium	0.28		
High	0.76*	0.48*	

Significant at  $\alpha= (0.05)$ .

It was found that there were significant differences in the total attitudinal stands of the students due to the frequency of participation. In other words, the students whose online participation was high voted for more positive stands towards the total degree of the attitudes than those students whose frequency of online participation was low (Akkoyunlu and Soylu, 2006; Hwang and Arbaugh 2006). *The following findings clarify the attitudinal differences:*

- ◆ There are significant difference in the students' attitudes between the high and low frequencies in favor of the high frequencies of online participation. This could be due to the premise that the students' high

This frequency might be related to the attitudes to see differences between the levels of frequency in view of the students' attitudes. Since this is the first attempt to implement blended learning at An- Najah National University, this medium percentage of online participation (56.2 %) seems sufficient to objectively assess the students' satisfaction towards the blended learning environment.

### Hypothesis 1:

There are no significant differences in the students' attitudes due to the frequency of participation on the OCC.

**Table (6)**

The means and standard deviations of the three attitudinal domains due to the frequency of participation.

N. of Times (Levels)	Low N=17		Medium N=41		High N=15	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
A: students' attitudes towards BL process	3.56	0.89	3.77	0.82	4.24	0.46
B: Students attitudes toward BL content	3.58	0.71	3.76	0.62	4.35	0.42
C: students' attitudes towards ease of use of computers and OCC	3.21	0.72	3.72	0.79	4.05	0.35
<b>Total</b>	3.47	0.73	3.75	0.68	4.23	0.35

**Table (7)**

One- Way ANOVA analysis of the significant differences in the attitudes and their three domains due to the frequency of participation.

Domain		Sum of Squares	df	Mean Square	F	Sig.
A: students' attitudes towards BL process	Between Groups	3.89	2	1.95	3.21	0.046*
	Within Groups	42.48	70	0.61		
	<b>Total</b>	46.37	72			
B: Students attitudes toward BL content	Between Groups	5.40	2	2.70	7.27	0.001*
	Within Groups	25.99	70	0.37		
	<b>Total</b>	31.39	72			
C: students' attitudes towards ease of use of computers and OCC	Between Groups	5.79	2	2.90	5.74	0.005*
	Within Groups	35.31	70	0.50		
	<b>Total</b>	41.10	72			

towards blended learning (Cappel & Hayen, 2004; Heckman & Annabi, 2005; Yukselturk & Top, 2005- 2006) . It could be the case that the students had high achievement level because blended learning motivated them to learn. The following item taken from the attitude questionnaire puts it simply:

**Table (4)**

**Means, standard deviations, and percentages for the students attitudes toward BL content.**

No.	Item	Mean	S. D.	Percent	Attitude
25	The BL content encouraged me to learn.	4.11	1.01	82.2	Positive

The aforementioned table states that 82.2 % of the students agreed that blended learning motivated them to learn. This could be the same reason for the high success rates of the students showing positive attitudes.

### **The effect of the frequency of online participation on the students' attitudes:**

To answer the third question of the study, the following findings were reached:

**Table (5)**

**Frequencies of participation and the percentages**

Variables	Levels	Frequencies	Percent
<b>N. of Times</b>	Low	17	23.3 %
	Medium	41	56.2%
	High	15	20.5 %
	<b>Total Degree</b>	73	100 %

In reference to the aforementioned table, it seems apparent that 23.3% of the students' participation was low. The low frequencies of online participation could be related to the fact that not all the computer labs at An- Najah University have headphones since most of the online tasks were geared towards listening activities. Such low frequencies might also be due to the fact that those students might have faced a difficulty in downloading and uploading the online videos since the students indicated that the internet access from home was denied. It is also evident that 20.5 % of the students recorded a high percentage of participation. This could be due to the fact that those students had high learning goals and this motivated them to venture into the online environment to make use of all the available videos and tasks (Klein et al., 2006) . Also, 56.2 % of the students had medium level of participation.

students liked the blended course because it allowed for more student to student communication (Humbert and Vignare, 2005) . The highest percentage (76.8 %) was given to the students' attitudes towards the blended learning content. Most of the students' attitudinal responses, in reference to the blended learning content, revealed that they liked the videos as they were related to the course ILOs and that the forums improved interaction with other classmates.

## The correlation between the achievement level and the attitudes:

To answer the second question of the study, the following hypothesis was developed:

### Hypothesis:

There is no direct relation between students' attitudes and their achievement level.

After using the statistical analysis of Pearson Correlation, the following table shows that there is a direct relation between the achievement level of the students and their attitudes:

**Table (3)**

The correlation between the achievement level and the three domains of the attitudes and their total degree.

		Ra	Rb	Rc	total
Final Grades	Pearson Correlation	0.247**	0.335**	0.361**	0.335**
	Sig. (2- tailed)	0.035	0.004	0.002	0.004

\*\* Correlation is significant at the 0.01 level (2- tailed) .

The students' views towards the three domains of the OCC module significantly increased as their achievement level improved (Sankaran et al., 2000) . This finding is similar to that of Akkoyunlu and Soylu (2006) as they also found that the more the students participated in online tasks, the more positive views they developed. As a result, this finding suggests that the students had higher grades because they liked the blended approach as researchers such as Norton and Irvin (2007) indicated that developing a positive attitude towards any educational subject results in higher success rate. The students who had high achievement level shaped positive attitudes



**Table (1)**

**Reliability Coefficients (Alpha) of the three domains of the questionnaire items.**

Domain A: students' attitudes towards BL process	0.93
Domain B: Students attitudes toward BL content	0.89
Domain C: students' attitudes towards ease of use of computers and OCC	0.88
<b>Total</b>	<b>0.96</b>

## Discussion and Findings:

To answer the first question of the study, the students' overall attitudes towards Blended learning were measured as follows:

### Students' attitudes towards the three domains of blended learning:

The students' attitudes towards the three domains are analyzed in terms of the average mean score. The average mean score of (3) was considered as a reference value for analyzing the attitudes since the mean scores over (3) were considered positive while those below (3) were valued as negative. The Means, standard deviations, and percentages for the three domains are clarified in the following table in view of the total attitudinal responses of the students:

**Table (2)**

**The total attitudes in view of the three domains.**

No.	Range	Mean	S. D.	Percent	Attitude
1	students' attitudes towards BL process	3.82	0.80	76.3	Positive
2	Students attitudes toward BL content	3.84	0.66	76.8	Positive
3	students' attitudes towards ease of use of computers and OCC	3.67	0.76	73.4	Positive
<b>Total</b>		<b>3.78</b>	<b>0.68</b>	<b>75.7</b>	<b>Positive</b>

This table sums up that 75.7 % of the students had positive stands towards the three domains of the OCC ease of use, and the Blended learning content and process. Such a high degree shows that when online environments are designed in a way that is feasible and easy to use, learners will be encouraged to get engaged in the activities and eventually learn better. It is no wonder that the students liked the idea of blending the course since blended learning made the course more enjoyable and lively. Many researchers believe that

The researcher (the instructor) encouraged the students and allowed them to communicate their ideas without receiving comments on their grammatical errors. The instructor's comments on the errors were sent in private messages to the students. In class, the teacher allowed the students to refer to their online discussions without commenting on each others' language errors; they just communicated the ideas in- class. Then, it became the norm that the in- class communication is related to the online tasks since the online tasks were either pre- or post activities to the actual in- class lecture. The contents of the course were uploaded into the OCC every two weeks by the instructor. The online tasks were clarified in- class so that it would be easy for the students to answer them and the students were given rubrics for self- evaluation. Participation in the forum environments and face to face sessions was obligatory and students were encouraged to participate and contribute to the process by dedicating 10 points for participating in each task in accordance with specific rubrics for their online tasks.

### **Achievement Level:**

The final grades of students were taken into consideration to evaluate their achievement level. In order to evaluate students' overall achievement in the course , midterm examinations, online assignments and activities were taken into consideration and evaluated as follows: (20%) for the First exam, midterm examination (20%) , and for the final (50%) . The last 10% of the total grade was given to online assignments and activities. The passing grade was set at 60%.

The course lasted for four months. All data were entered into a statistical analysis package for a later analysis. Statistical analyses were conducted using independent t- test and percentage analysis. All statistical tests reported in this article were conducted with a significance level of ( $\alpha= 0.05$ ) . Negative items had their scoring reversed. The alpha reliability coefficient of the scale was found as (0.96) . A jury of four subject specialists' opinions were taken about the content validation of the instrument. Table (1) clarifies the coefficient values of the questionnaire.

the researcher with the help of two specialists. Statements in the questionnaire were categorized into three main domains. The first 12 items identify the students' attitudes towards BL process. The items from 13-28 address the students' attitudes toward the BL content. And the rest of the items, except for items 30 and 41, are related to the domain of students' attitudes towards ease of use of computers and OCC. Items 30 and 41 address the accessibility of internet either from home or university. The variables of the study are the achievement level and the frequency of online participation. The scoring for the questionnaire was established as follows following the five-Likert score: Strongly Agree: 5 points; Agree: 4 points; Undecided: 3 points; Disagree: 2 points, and; Strongly Disagree: 1 point.

## **Procedures of the Study:**

For the purpose of the current study, the researcher made use of the online asynchronous approach (OCC module) since many researchers proved that it was a powerful teaching strategy (Garrison & Anderson, 2003). The researcher also used the discussion forums and uploaded five tasks in accordance with the course objectives. The first task was commenting on a short written paragraph and finding the errors. The IT tool the students had to use was the discussion forums. The second task was an uploaded video and the students had to watch, listen and answer short questions on condition that they use two or more of the vocabulary items used in the videos or from the related articles they are required to read from the textbook in relation to the uploaded video. The third task was optional and it was an online quiz about the vocabulary items they should have learnt. The fourth task was divided into two parts: first they should listen to a podcast and then watch a simplified video about the differences between males and females (a topic they had to study in their textbook) . Then the students are instructed to answer questions related to the videos. Finally, the fifth task was optional as it was related to congratulating classmates on the occasion of the Al- Adha Feast which was approaching. The students were expected to start chatting on the forum by greeting one another on the occasion and then by writing two statements answering the following question: "What did you do on the first two days of the Feast? ". It is also noteworthy to state that the students could upload and download exercises, sample tests, and related information such as dates of exams. They can also stay in touch with the teacher and, at the same time, comment on their classmates' answers.

## Sample:

The study participants consisted of 92 EFL non- major students enrolled in two sections of an English Language compulsory course (10103) at An-Najah National University

## Data Collection Process:

Data required for this study were collected by the instructor of the course through a questionnaire. The questionnaire was distributed by the end of the course and 73 students filled it in. The researcher have collected additional data on students' achievement level and frequency of participation on the forum.

The statistical analyses: One- Way ANOVA was used to test the differences in the attitudes due to the frequency of online participation. Post Hoc Multiple comparisons (LSD) were used to test the differences in the attitudes in relation to the frequency of participation (high, medium, and low) . Also Pearson correlation was used to test the relation between the students' achievement level and attitudes. The correlation is significant at the 0.01 level (2- tailed) .

## Frequency of Participation to the Online Environment:

The messages sent to the forum were saved, and the frequencies of online participation were recorded by students' names. Online participation frequency in a process of 14 weeks ranged from (0 to16) . The participation frequency scale is as follows: (0- 4: low) , (5- 9: medium) , (10- 16: high). The students were allowed to post at least three times for each task by uploading their own answers, and then commenting on their classmates'. The third post was about uploading a similar webpage or video related to the topic under discussion to enrich their minds with information about the topic. They were also allowed to upload a summary of the whole answers posed by their classmates after reading all their classmates' comments. The percentage of the blended component as compared to the face to face sessions was assessed in terms of the number of the online activities that required 2 hours a week compared to 3 hours of face to face sessions per week.

A questionnaire was developed to identify students' views on blended learning environment, that is the OCC. A 41 item questionnaire was designed by

attitudes towards the blended learning material participated more in the discussion forums. Moreover, the students who gave voice to a negative attitude were not active participants in the online activities. However, BALCI & SORAN (2009) found that the students' frequencies of online participation didn't significantly affect their positive views towards blended learning.

Cottrell and Robinson (2003) investigated the students' attitudes towards the use of blended learning in an accounting course and came up with the conclusion that the students preferred the blended learning approach. Relatedly, Humbert & Vignare (2005) ventured into the students' perceptions towards introducing blended learning to their courses and found that the students liked the blended approach. Researchers as Sauers and Walker (2004) found that students in a blended course indicated that their course system is more beneficial than the traditional face- to- face lectures.

As far as the asynchronous approach is adopted, Wu & Hiltz (2004) investigated the students' perception of using the asynchronous online discussions and came up with the conclusion that students expressed that their learning increased due to the online activities. Northrup (2001) demonstrated students' views towards the asynchronous approach to blended learning and that participating in online activities increased their learning (Christensen, 2003; Burgon and Williams, 2003) .

## **Methodology:**

The objective of this study is to find out the effect of the students' achievement level and frequency of online participation on their attitudes towards the blended learning process, content and ease of using the OCC learning environment. To answer the questions of the study, the following procedures were undertaken:

## **The population:**

The population of the study included all the students enrolled in English 10103 at An- Najah National University. There were 68 sections of English 10103. The course is a general one taught to students from different majors upon success in the University Placement Test of English or after taking a remedial course in English.

students and that their satisfaction increases. They also found that the students even preferred the asynchronous approach to blended learning especially the forums and the e- mails.

A comparative study of accounting principles by Vamosi et al. (2004) touched upon the students' attitudes towards face- to- face and online lectures during the second half of the course. In the post course survey, the students' reactions towards the online courses were positive. Chen and Jones (2007) tried to find out the students' satisfaction with a blended course and revealed that students were more interested in taking a blended course.

Akkoyunlu and Soylu conducted a study (2006) to investigate the views of students regarding the blended learning environment. The results of the study revealed that the more the students participated in the online discussion forums, the more they achieved and the more positive views they developed towards blended learning. Moreover, the study came up with the conclusion that both the face- to- face lectures and the online tasks contributed to the learning process. In the same vein, Sankaran et al. (2000) found that the students showing more positive views towards blended learning had higher scores in the achievement test than the students whose attitudes were less positive. Similarly, BALCI & SORAN (2009) conducted a study to correlate the students' attitudes towards the blended learning environment with the students' achievement level and frequency of online participation. They found that the students' views were positive and that those students having higher success level showed more positive attitudes than the ones who less frequently participated online. Other researchers found that the online communication with other students improved their performance and increased their positive attitudes towards blended learning (Cappel & Hayen, 2004; Heckman & Annabi, 2005; Yukselturk & Top, 2005- 2006) .

Researchers as Singh (2003) found that the students participating in a blended course performed 10 % better than those enrolling in a section taught in the traditional approach. It is also evident that the students' attitudes towards the online material in the post- course questionnaire were more positive than their attitudes expressed in the pre- course questionnaire (Vamosi et al., 2004).

Hwang and Arbaugh (2006) examined the students' feedback regarding a blended management course and found that students who had more positive

## Definition of terms:

Blended learning refers to the incorporation of technology into the teaching process by applying two approaches either the synchronous or the asynchronous mode of blending. The asynchronous approach means using online platform when the students enrolled in a blended course can't be online at the same time by using discussion boards or e-mails. Synchronous learning refers to the learning that is supported by media such as videoconferencing and chat rooms when the students and the teachers are available at the same time.

## What is OCC:

Blended learning is adopted at An- Najah University to offer feasibility in the time and place of learning through using the OCC (Online Course Container) model which is an online software that has been implemented in a blended learning pedagogical model. It is an interactive multimedia environment that houses all the materials and tools that learners need in a central web platform. The environment has been updated to meet the needs of almost all course objectives. There are special discussion forums to which the teachers can upload videos or visual aids. Moreover, teachers can send an online assignment or a notice to one or all the students enrolled in a course.

## Questions of the Study:

*The study is intended to answer the following questions:*

- What are the students' general attitudes towards implementing the blended learning approach by using the OCC in view of the domains of: the OCC ease of use, the BL content and process?
- What is the effect of the students' achievement level on their attitudes?
- What is the effect of students' frequency of participation on their attitudes?

## 4.Literature Review:

Humbert and Vignare (2005) found that students liked incorporating the instructional strategies and resources using blended learning. Also, the students added that their student to student communication increased. Burgon and Williams (2003) clarify that blended learning arouses the interests of the

The most up- to- date methods of teaching make use of blended learning to allow for self- paced and student- centered learning (Barenfanger, 2005) . To put it simply, learning and teaching are no longer restricted to classroom lectures. Blended learning saves time and offers easy ways of accessing the teaching material regardless of the time and place (Munro and Munro, 2004) . Many studies have shown that blended learning can be used to improve pedagogy, increase cost- effectiveness, accessibility, flexibility, and simply revision (Brown, 2003; Graham, 2005; Osguthorpe & Graham, 2003) .

Researchers of Stanford and Tennessee Universities contended that blended learning is much better than face- to- face learning and blended learning (Singh & Reed, 2001) . Therefore, this study combines the benefits of both online and face- to face learning by means of adopting the asynchronous approach to blended learning.

## **What is blended learning in an EFL environment:**

Blended learning in the current study means the integration of the face- to face learning with the blended learning (Garrison & Kanuka, 2004) . Other researchers such as Dziuban, et al. (2004) define blended learning as “a pedagogical approach that combines the effectiveness & socialization opportunities of the classroom with the technologically enhanced active learning possibilities of the online environment”. It is believed that blended learning is about “rethinking and redesigning the teaching & learning relationship” (Garrison & Kanuka, 2004) .

Blended learning is recognized as a combination of online and traditional methods (Usta, 2007) . In this study, blended learning involves incorporating different activities and technologies designed in accordance with a needs analysis that goes in line with the course objectives. In other words, it means supporting traditional instruction with electronic media and materials (Bersin, 2004) that make the process of learning effective.

Cottrell & Robinson (2003) contend that Blended learning could be used by instructors as a problem solving method to manage large classes by making use of technology so as to give the students as many tasks as possible. Students could get the educational material by the use of videos, blogs, chat rooms, and discussion forums (Duff & Uchida, 1997) . These tools allow EFL learners to have more access to target language.



## ***Abstract:***

It is axiomatic that many attempts were made to use technology in teaching English for the sake of improving students' learning outcomes and increasing variability in teaching the English Language, yet few Arab researchers have dug deep into modes of teaching as such. This paper aims at investigating An-Najah National University students' perceptions towards blended learning environment using OCC (Online Course Container) in view of their achievement level and frequency of online participation. The study included (92) students enrolled in a general English course (10103) offered at the Language Center at the university.

A questionnaire was designed to measure the students' attitudes towards blended learning using the (OCC) in terms of: the process, ease of use, and content. The study concludes that in general the students' attitudes towards BL were positive in terms of the three domains revealing that there was a direct relation between the achievement level and the students' positive views. Moreover, there were significant differences in the students' positive attitudes due to the frequency of online participation. The more frequently the students participated on the forum, the more positively their views were shaped.

***Keywords:*** Blended learning, attitudes, EFL learners, achievement level, frequency of participation.

## ملخص:

أنه لمن البديهي أن تكون هناك محاولات عدة لاستخدام التكنولوجيا في مجال تعليم اللغة الانجليزية، من أجل تحسين أداء الطلبة، وزيادة التنوع في مجال تعليم اللغة. تهدف هذه الورقة إلى دراسة توجهات طلبة جامعة النجاح نحو التعليم المدمج باستخدام وعاء المساقات (OCC)، من حيث عدد مرات المشاركة ومستوى تحصيل الطلبة. اشتملت الدراسة على (٩٢) طالباً وطالبة مسجلين لمساق (١٠١٠٣) وهو متطلب جامعي. ولقياس توجهات الطلبة نحو وعاء المساقات.

صُممت استبانة تتضمن ثلاثة مجالات هي: الإجراء والمحتوى وسهولة الاستخدام. كما قيس مدى تأثير متغيري عدد مرات المشاركة الإلكترونية، وتحصيل الطلبة في المساق على اتجاهات الطلبة. وخلصت الدراسة إلى أن توجهات الطلبة نحو التعليم المدمج بشكل عام كانت إيجابية لجميع المجالات حيث كانت هناك علاقة طردية بين علامات الطلبة وبين اتجاهاتهم الإيجابية. فكلما ارتفع مستوى تحصيل الطلبة في المساق، كلما زادت اتجاهاتهم الإيجابية، كذلك وجدت فروق ذات دلالة إحصائية في الاتجاهات تعزى لمتغير عدد مرات المشاركة لصالح المشاركات العالية. فكلما زاد عدد مرات المشاركة، كلما كانت اتجاهاتهم أكثر إيجابية.



# **Students' Frequencies and Performance in Blended Learning as Correlated to their Attitudes**

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