

**Learning Styles of An-Najah National University Students in
Learning English as a Foreign Language**

أنماط تعلم اللغة الإنجليزية لدى طلبة جامعة النجاح الوطنية

Fawaz Aqel*, & Sameer Mahmoud**

*Teaching Methods Department. Faculty of Educational Science.

**Department of English. Faculty of Art.

An-Najah National University. Nablus. Palestine.

E-Mail: a_aqel@najah.edu

Received: (5/8/2004), Accepted: (13/1/2005)

Abstract

This study sought to identify the learning styles used by An-Najah National University students in their learning of English as a foreign language. To this end, the study raised several questions: What are the learning styles used by An-Najah National University students in their learning of English? Are there any statistically significant differences at $\alpha = 0.05$ in learning styles which may be attributed to variables of gender, major, average, place of living, computer use and academic level? The data were collected from a randomly chosen sample of 120 male and female students or 37.8% of total population of the study of 320 male and females students. A 24-item questionnaire was used for the purpose of data collection. For data analysis, the researchers used t-test and One-Way Analysis of Variance. It was found that there were no statistically significant differences at 0.05 in the learning styles which might be attributed to gender. However, it was found that there were statistically significant differences at $\alpha = 0.05$ in learning styles among students due to the use of the computer. In the light of findings of the study, the researchers recommended a diversity in the styles used in teaching English, such as changing the seating of students in classes, introduction of creative activities and the use of audio-visual aids, which

suit learning styles used by students in their learning of English. Further, the researchers recommended the introduction of computer as a compulsory course in Department of English and Teaching Methods Department given its effective role in making students depend on themselves to improve their proficiency in the language. The researchers also suggest that a study be conducted at other universities to identify the learning styles used by students in the learning of English and the relationship between these styles and student's personality.

ملخص

يستخدم الدارسون في المدارس والجامعات أنماط وعادات تعلم مختلفة في سعيهم للتحصيل. إن التعرف على السمات الشخصية وأنماط التعلم هذه قد تساعد في إلقاء الضوء على مواطن القوة والضعف لدى هؤلاء الدارسين، وبالتالي تجنب المواقف أو الأوضاع التي تزيد من مستوى الإجهاد لديهم، وبالتالي تقديم النصح والإرشاد لهم لكي يستغلوا جميع إمكانياتهم بعد تخرجهم. على خلفية ذلك، تأتي هذه الدراسة للتعرف وتحديد أنماط وعادات التعلم لدى طلبة قسمي اللغة الإنجليزية وأساليب التدريس في جامعة النجاح الوطنية. ولتحقيق ذلك، طرح الباحثان عدد من الأسئلة منها: ما هي أنماط التعلم التي يوظفها طلبة القسمين المذكورين في تعلمهم للغة الإنجليزية؟ هل توجد فروق ذات دلالة إحصائية على مستوى 0.05 في أنماط وعادات التعلم والتي تُعزى إلى متغيرات الجنس، التخصص، المعدل، مكان السكن واستخدام الحاسوب ومستوى الطلبة الأكاديمي؟ تكون مجتمع الدراسة من ٣٢٠ طالب وطالبة من القسمين وتم اختيار عينة عشوائية بلغت ١٢٠ طالباً وطالبة أو ٣٧.٨% من مجتمع الدراسة. قام الباحثان بتطبيق استبانة مكونة من ٢٩ فقرة على أشخاص الدراسة للتعرف على أنماط وعادات التعلم لديهم. بعد جمع البيانات، قام الباحثان باستخدام اختبارات وتحليل التباين الأحادي لتحليل نتائج الدراسة. أظهرت نتائج الدراسة عدم وجود فروق ذات دلالة في أنماط التعلم لدى الطلبة من الجنسين ولكن أظهرت الدراسة وجود فروق ذات دلالة في أنماط التعلم لدى الطلبة والتي يمكن أن تعزى إلى استخدام الحاسوب. وفي ضوء نتائج الدراسة، يوصي الباحثان بتنويع أساليب التدريس وتغيير أماكن الجلوس واستعمال وسائل تعليمية وتقنيات تربوية مختلفة وجعل مساق الحاسوب مساقاً إجبارياً لطلبة قسم اللغة الإنجليزية وأساليب التدريس لدوره الفاعل في اعتماد الطلاب على أنفسهم. كما يوصي الباحثان إجراء دراسات في الجامعات لمعرفة العلاقة بين السمات الشخصية وأنماط التعلم التي يستخدمها الطلبة في تعلمهم للغة الإنجليزية وأثر هذه الأنماط على الصحة النفسية عندما ينخرط هؤلاء الطلبة في سوق العمل.

Introduction and theoretical background

The 21st century student is exposed to a tremendous flow of information which is often difficult for him/her to cope with. Today's student has many available resources which he/she can tap to learn languages and other disciplines. These resources include the tape recorder, language labs, videotape and the Internet, TV and radio. If the student does not change his/her learning style of all disciplines and language learning in particular, then he/she may find himself or herself left without the necessary skills. Therefore, it is necessary for the 21st century student to make active use of technology to improve his/her language performance. He/she must go beyond what he/she is exposed to in class by his/her teacher by depending more on himself in learning, practising and acquiring of language skills (Aqel, 2000).

Today's university student will face many challenges in the future, simply because he/she has been trained for a time different from his/her and for tasks he has never expected. The learner of today and tomorrow does not need to memorize a huge amount of information. Rather, he/she is in need of learning how to find the information, how to use it, how to analyze it and express it in his/her own language through immediate feedback during the learning process (www.khayma.com, 2003).

The classroom will remain a place for learning. However, the modern attitudes towards learning call for change in the commonly used styles in classes. One teaching strategy is to change the classroom physical environment which includes changing the students' seating by making a U shape circle, a full circle, a square shape, and small groups according to activities and situations. The introduction of technological aids to the classroom will change a lot of details. Learning in classroom will include a variety of flexible demonstrations. To enhance his/her concentration and attention, the student needs his/her teachers' help to employ as many of his/her senses as possible. Language learning strategies are considered essential elements and factors for the success of language learners. They function as tools for active, and self-directed involvement which can develop 12 communicative abilities (Oxford and Green, 1992).

attitudes, intelligence, choice of audio-visual aids, motivation and social factors.

Katan (1994) believed that it is possible to get information about students' learning styles and forms through formal ways such as exams, questionnaires, interviews and standardized surveys, or through non-formal ways such as observation of students recording or video recording.

In an article on language learning styles which appeared in <http://llestfis.edu/parents/styles>, (Martin, 2003), it was found that some students had faced language difficulties with big success but with little efforts. In contrast, other students faced these difficulties with a little success and enjoyment. The article also showed that each learner had his/her best way of learning and was affected by his/her culture, educational background and personality. On the other hand, Haynes (2001), Martin (2004), and Shoebottom (2003) maintained that there are many learning styles and habits used and practised by different learners:

1. Aural learner's style. The learner gets involved in a communication activity. He/she listens to others and interacts with them by talking, discussing and debating.
2. Visual learner's style. The learner visualizes words, pictures, cards, maps, paintings and texts.
3. Analytic learner's style. The learner feels comfortable using language tasks focusing on language mistakes, structures, and uncontrolled (free) conversations. He does not focus on the overall picture but on parts and details.
4. Global learner's style. The learner focuses on the overall picture and disregards details of pictures and parts. He means to focus more on conveying message than on language mistakes, group activities, and games.
5. Physical learner's style. The learner touches things and focuses on movement.

6. Solitary learner's style. The learner focuses on self-learning through his/her own abilities, needs and interests.
7. Social learner's style. The learner focuses on learning through interaction with students and his/her teacher.

Many learners know and discover their own learning styles. As the Chinese saying goes, "I hear, I forget; I see, I remember; I practice and work, I understand." One Chinese poem describes types of learning styles as follows: "Go to people; live with them; begin from what they know; build on what they know; be a distinguished leader" (Martin, 2004, p.6).

When we finish a certain task and complete work, people will take note that we have completed our task ourselves (Willing, 1985; as cited in Skehan, 1994).

Kolb (1984) cited two ways which students used when dealing with learning situations. In one, the learner looked at the educational material (content) through his/her senses, feeling and thinking. In the other, the learner dealt/interacted with the educational content through active practice and observation.

Heffernan (1999) found that many studies on language learning styles differed in their applications and benefit, according to motivation and achievement, language learning level, years of language learning, methods of teaching, difficulty of content, students' background and sex. He added that successful language learners employ different language learning styles. And the teacher can help in expanding learning styles via teaching strategies which may help weak students in choosing the right and appropriate learning styles for different educational tasks.

Problem of the study

Despite the variety and plethora of academic courses the university student takes in English, and the strenuous efforts universities and teachers devote to improve students' language skills, the students' language performance, unfortunately, has been frustrating. This could be attributed to the learning styles and habits used by students in studying

English. Moreover, in spite of the significance of the subject, there is a dearth of studies which have investigated the learning styles and habits used by university students in their learning of English.

Objectives of the study

This study aims to identify the common learning styles employed by An-Najah National University's English and teaching methods majors in their learning of English. It also aims to find out whether the learning styles, employed in learning English, differ at $\alpha = 0.05$ due to variables of sex, major, student's GPA, place of residence, computer use and student's college.

Research questions

This study sought to answer the following questions:

1. What styles of learning are used by An-Najah University students in their learning of English as a foreign language?
2. Are there any significant differences at $\alpha = 0.05$ in the styles of learning used by An-Najah University students due to gender?
3. Are there any significant differences at $\alpha = 0.05$ in the styles of learning used by An-Najah University students due to major?
4. Are there any significant differences at $\alpha = 0.05$ in the styles of learning used by An-Najah University students due to the student's average?
5. Are there any significance differences at $\alpha = 0.5$ in the styles of learning used by An-Najah University students due to the computer use?
6. Are there any significant differences at $\alpha = 0.05$ in the styles of learning used by An-Najah University students due to the academic level?

Limitations of the study

This study was limited by:

1. Students drawn from departments of English and Teaching Methods at An-Najah National University.
2. Second semester 2003/2004.

Review of related literature

Haynes (2001) pointed that students' learning styles have to be taken into consideration when teaching English. She added that learners of the language are used to certain learning styles in their mother tongue and these styles are transferred and used when they learn a second or a foreign language. Commenting on types of learners, Mariani (1996) said, "It is very difficult to change student's way of learning if he/she is, for example, an analytic learner who is meticulous as he cares about accuracy and form. It becomes difficult for him/her to get involved in roles, debates and educational games. However, if he/she is a global learner, learning of language for him/her means focusing on meaning and fluency, use of language instead of focusing on rules. He added that group work or cooperative learning (3-5 learners) can help students to adapt their learning styles to be in harmony with the requirements of the learning tasks.

Several studies (Oxford 1993; O'Malley and Chamot, 1990) found that students/learners of languages used different learning techniques such as repetition, imitation, linking, memorization, development of positive attitude towards language and application of information.

Stoller (1990) pointed out that the use of audio-visual aids has become very important and that the world is moving towards visual aids such as films, and pictures as flexible instruments to learn another language. Salman (1986) argued that educational aids could alleviate the problem of learning and encourage/promote interaction between the learner and the educational situation. In the same context, Lee and Copper (1970) maintained that educational aids might be renewable

themselves as opposed to good learners who were able to benefit/make active use of any educational teaching situation.

On the relationship between student's language level and learning style, Mahlobo (1999) found that it was positive while Doering (2002) found that the strong student, in his/her learning of language, used more different language styles in comparison with the weak learner.

Oxford et al (1995) found that a good language learner developed combinations of styles rather than one single style of learning.

Pertaining to major, Osanai (2000) found that science and computer science majors used more learning styles than law and business administration majors. Chamot and Kupper (1989) maintained that the nature of the learning task determines the style to be used in dealing with it. They found that some learning styles were corrected with learning tasks.

On class size, Sabander (1988) found that large classes posed a problem in classroom setting and reduced effectiveness of classroom management. The small number of students in class enhanced their attention and their performance more than large classes. Bloom (1976) found that creating opportunities for small class group work, to help each other, proved to be an effective way to motivate students and correct errors. Bloom also believed that the size of the group is one of the important elements which influences individual differences in language learning. Information presented to a group of 20-70 might be effective with some learners but might not be so with others. Also time allocated for each class does not allow teachers to give large groups their individual attention. Teachers also find it difficult to make observation of their participation. About 20% of students' achievement depends on participation in classroom.

Brown (1994) maintained that good use of exercises and motion pictures in classes allows students to use language skills in a dynamic and effective manner. McCombs (1997) maintained that classes have a group of students of different backgrounds, goals, skills and personal

Table (1): Distribution of sample due to gender

Gender	Frequency	Percent %
Male	35	28.9
Female	86	71.1
Total	121	100

Table (2): Distribution of sample due to major

Major	Frequency	Percent %
English	51	42.1
Methods of English	70	57.9
Total	121	100

Table (3): Distribution of sample due to school average (total sum of student's grades)

Average	Frequency	Percent %
60-69.9	23	19.0
70.79.9	67	55.4
80 and more	31	25.6
Total	121	100

Table (4): Distribution of sample due to place

Place	Frequency	Percent %
City	48	39.7
Village	73	60.3
Total	121	100

Table (5): Distribution of sample due to computer use

Computer using	Frequency	Percent %
Yes	81	66.9
No	40	33.1
Total	121	100

Table (6): Sample of distribution due to academic level

Academic level	Frequency	Percent %
2 nd	27	22.3
3 rd	41	33.9
4 th	53	43.8
Total	121	100

Instrument of the study

A 24-item questionnaire on learning styles was used. A learning style inventory, the questionnaire was not developed specifically for language learning purpose. It was adopted from the following web site: www.clat.psu.edu/lsi, 2004). The questionnaire was checked by three experts in the field of statistics and education to find out the degree of its suitability to the study. The referees suggested a change in the scale from a three-point scale to a five-point scale: strongly agree, agree, strongly disagree, disagree, neutral.

Reliability of the instrument

The reliability of the study was calculated by using the Cronbach Alpha formula. Accordingly, the reliability coefficient was 97.5% which was acceptable for the purpose of the study.

Statistical analysis

The data, collected by the researchers, were analyzed by using different techniques to answer the questions of the study. These techniques included means, standard deviations, percentages, Independent T-Test and One-way ANOVA. Cronbach Alpha formula was used to determine the reliability coefficient of the questionnaire.

To analyze the findings, the researchers used the following ranks for analysis:

(80% and more)	very high degree
(70 - 79.9 %)	high
(60 - 69.9 %)	moderate
(50 - 59.9 %)	low
(less than 50 %)	very low

Results and discussion

To answer the first question, "What styles of learning are used by An-Najah University students in their learning of English as a foreign language?", the researchers used the means, standard deviations, percentages and ranks for each item in the questionnaire.

Table (7): Means, standard deviations, percentages and ranks for questionnaire items, arranged in a descending order

Item	Item no. in questionnaire	Mean	S.D	%
1. Can remember more about a subject through the lecture method with information, explanations and discussions.	3	4.40	0.76	88.0
2. Prefer information to be presented through the use of visual aids.	9	4.36	0.85	87.2
3. Like to write things down or to take notes for visual review	2	4.05	0.89	81.0
4. Prefer to make posters, physical models, or actual practice and some activities in class.	16	3.98	1.01	79.6
5. Require explanations or diagrams, graphs, or visual directions.	6	3.93	0.95	78.6
6. Enjoy working with my hands or making things.	10	3.89	0.95	77.9
7. Am skillful with and enjoy developing and making graphs and charts.	1	3.76	0.81	75.2
8. Can tell if sounds match when presented with pairs of sounds.	18	3.76	1.00	75.2
9. Remember best by writing things down several times.	14	3.74	1.20	74.8

...continue table (7)

Item	Item no. in questionnaire	Mean	S.D	%
10. Can understand and follow directions on maps.	5	3.69	0.84	73.8
11. Do better at academic subjects by listening to lectures and tapes as opposed to reading a textbook.	22	3.65	0.89	73.0
12. Play with coins or keys in pockets.	4	3.51	1.10	70.2
13. Learn to spell better by repeating the words out aloud than by writing them on paper.	13	3.50	1.29	70.0
14. Can better understand a news article by reading about it in the paper than by listening to the radio.	11	3.44	1.12	68.8
15. Chew gum, smoke, or take a snack during study.	7	3.39	1.11	67.8
16. Feel the best way to remember is to picture it in my head.	19	3.38	1.00	67.6
17. Learn spelling by tracing the letters with my fingers	24	3.37	1.23	67.4
18. Would rather listen to a good lecture or speech than read about the same material in a textbook.	8	3.29	0.85	65.8

exercises and motion pictures in classes allows the student to employ his/her language skills effectively. In the same context, Wlodowski (1990) pointed out that classroom activities, which include motion pictures, might be a helping factor in students' learning of language. In this case, learners can be considered "visual learners".

Items 12, 15, 20, 23, however, received a very low rating. The percentages of responses were 1.34; 1.11; 1.16 and 1.13 respectively. The items were all about the student's interest during language class. It was found that students wanted to learn the language and never attempted to play during class since they had chosen the majors: English language and Literature and English Teaching Methods.

To answer the second question of the study, "Are there any significant differences at $\alpha = 0.05$ in the styles of learning used by An-Najah University students due to gender?", the researchers used the independent t- test to analyze the data from the questionnaire.

Table (8): T-Test results on differences in the styles of learning used by An-Najah University students in their learning of English as a foreign language due to gender

Gender	N	Mean	SD	D.F	T	Sig.*
Male	35	3.52	0.32	119	1.120	0.265
Female	86	3.44	0.36			

The results of Table 8 show that the computed t-test value was 1.120. This means that there were no significant differences at $\alpha = 0.05$ in the styles of learning used by An-Najah University students in their learning of English as a foreign language due to the gender. This result is contrary to that of Hsun (2002); Hatcher (2000) and Tarone (1981). In their studies, Hsun and Hatcher found that female students varied and used more learning styles than their male counterparts. Tarone found that female students had more problems in learning English. In the researchers' opinion, male and female students have problems in learning

Table (10): Frequencies, means and standard deviations for the average

Average	Frequency	Mean	S.D.
60-69.9	23	3.44	0.29
70-79.9	67	3.46	0.37
80 and more	31	3.47	0.35
Total	121	3.46	0.35

Table (11): One-Way ANOVA Test results for differences in the styles of learning used by An-Najah University students in their learning of English as a foreign language due to average

S.O.V.	Sum of squares	D.F	Mean square	F	Sig.*
Between groups	0.015	2	0.007	0.062	0.940
Within groups	14.728	118	0.125		
Total	14.744	120			

* Significant at $\alpha = 0.05$; critical at 3.07.

Table 11 shows that the computed F-value was 0.062. This means that there were no significant differences at $\alpha = 0.05$ in the styles of learning used by An-Najah University students in their learning of English as a foreign language due to the average.

As Table 11 shows, no statistically significant differences were found in the study sample which might be attributed to average of English at school. This result, however, is not in line with Chamot and Kupper's findings (1989) that the low-average students were unable to monitor their performance as opposed to high level students. Also this result does not agree with Deoring (2002) who found that good students, in their learning of English, used a variety of patterns as opposed to weak students. This result, in addition, does not agree with Bloom's finding (1976) that the school was an effective factor to predict school

Table (14): Frequencies, means & standard deviations for the academic level

Academic level	Frequency	Mean	S.D.
2 nd	27	3.56	0.24
3 rd	41	3.35	0.38
4 th	53	3.50	0.36
Total	121	4.46	0.35

As Table 14 clearly shows, there were differences in favor of sophomore students. The means amounted to 3.56. This is attributed to the university's introduction of computer courses as compulsory requirements to Teaching Methods' majors. There are also internet cafes and centers for computer learning. In addition, more and more teachers ask students to write and type their reports in English, thus improving their English in general.

To answer the sixth question, "Are there any significant differences $\alpha = 0.05$ in the styles of learning used by An-Najah University students due to the academic level?", the researchers used One-Way ANOVA Test to analyze the questionnaire data.

Table (15): One-Way ANOVA Test results on differences in the styles of learning used by An-Najah University students in their learning of English as a foreign language due to the academic level

S.O.V.	Sum of squares	D.F.	Means square	F	Sig.*
Between group	0.909	2	0.454	3.3874	0.023*
Within groups	13.835	118	0.117		
Total	14.744	120			

* Significant at $\alpha = 0.05$; critical at 3.07

Table 15 shows that the computed F-value was 3.3874. This means that there was a significant difference at $\alpha = 0.05$ in the styles of learning

Recommendations

In the light of the findings of the study, the researchers would like to suggest the following recommendations:

1. Conducting studies on the effect of teaching strategies on learning styles.
2. Introducing more educational situations in classes to enhance learner's participation and discussion given students' lack of attention.
3. Creating a flexible, enjoyable, convenient and comfortable classroom environment. To this end, the teacher should encourage active learning, cooperative learning and self-learning, thus diversifying ways of improving students' language skills.
4. Hosting other teachers in classes, thus introducing a change from classroom routine.
5. Changing classroom site and physical seating of students to make language learning close to life-like situations.
6. Using different activities, in classes, to help learners love the language.
7. Creating a conducive environment for debating and discussion which allow more practice of language skills.
8. Employing various means and visual aids to make it possible for learners to get the information.
9. Choosing materials (books and references) which suit the students' different learning styles.
10. Introducing a computer skills course as a compulsory requirement for all university students.
11. Conducting a similar study in other universities to compare the different learning styles used by university students.
12. Including more variables, in studies, such as qualification of university teacher and country from which degree was received.
13. Conducting a study on the impact of class size on teaching and learning styles.

- Hatcher, J. Austin. (2000). Motivation, instructional preferences, and learning strategies among Japanese university (EFL) students. M.A. Thesis, University of Hawaii. Dissertation Abstracts AAC 1401875.
- Haynes, Judie. (2001). Teach to students learning styles. Available at, www.ereythingsl.net/inservice/learningstage/php.
- Heffernan, Peter. (1999). "Questionnaire on learning styles". Mosaic 5.4. 54-68.
- Hsun, S.M. (2002). An investigation of English language learning strategies of grades (5-6) students in Taipei Taiwan. Ed. D. degree, Spalding University. Dissertation Abstracts AAC 3062003.
- Katan, D. (1994). Learning to learn; Atti Seminario Strategie di Apprendimento. Venezia: IRRSAE Veneto.
- Kolb, D.A. (1984). Experiential learning experience as the source of learning and development. Englewood Cliffs: Prentice - Hall.
- Lee, W.R. and Copper, H. (1970). Audio-visual aids to foreign language Teaching. London: Oxford University Press.
- Mahlobo, E. Bheakisenzo. (1999). Contextual and learner factors in the development of English second language proficiency. Ed. D. University of South Africa (South Africa). DAI-A61/02.
- Mariani, Luciano. (1996). "Investigating learning styles". TESOL Journal. 21.2. 547-557.
- Martin, Donald. (2004). How to identify your best learning styles. Available at - www.marin.cc.ca.us.
- Mathews, L. (2002). Why implement active learning. Available at <http://www2.una.edu/geography/active/why>.
- McCombs, D. (1997). The learner -centered classroom and school: Strategies for increasing students' motivation and achievement. San Francisco: W.H. Freeman.
- Mckeachie, W.K., Pintrich, P.R. and Lin, Y-G. (1995). "Teaching learning strategies". Educational Psychologist 20.3. 152-160.
- Ninnes, P. (1996). Informal learning strategies in the Solomon Islands. Department of Educational and Professional Studies, School of Education, Flinders University, Adelaide, Australia.
- O'Malley, J.M. and Chamot, A. (1990). Learning strategies in second Language acquisition. Cambridge: Cambridge University Press.

