

همیشه	معمولاً	گاهی	به ندرت	هرگز	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	۳۲. وقتی کسی در حال صحبت کردن به زبان انگلیسی است به تمامی جنبه‌های صحبت او (گرامر، لغت و غیره) دقت می‌کنم.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	۳۳. سعی می‌کنم درایم چگونه می‌توانم زبان‌آموز هرچه موفق‌تری باشم.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	۳۴. به گونه‌ای برنامه‌ریزی می‌کنم که وقت کافی برای مطالعه زبان انگلیسی داشته باشم.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	۳۵. به دنبال افرادی می‌گردم تا بتوانم با آنها انگلیسی صحبت کنم.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	۳۶. سعی می‌کنم برای خود فرصت کافی برای خواندن هرچه بیشتر متون انگلیسی فراهم آورم.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	۳۷. اهداف مشخص و تعریف‌شده‌ای برای بهبود مهارت‌های زبانی خود دارم.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	۳۸. پیشرفت خود را در یادگیری زبان انگلیسی همواره زیر نظر دارم و در مورد آن فکر می‌کنم.

قسمت ۵. مهارت‌های احساسات

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	۳۹. هر وقت از به کار بردن زبان انگلیسی احساس ترس می‌کنم از زبان انگلیسی استفاده نمی‌کنم و در عوض به خود آرامش می‌دهم.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	۴۰. حتی وقتی ترس از آن دارم که ممکن است هنگام صحبت به زبان انگلیسی مرتکب اشتباهاتی شوم خودم را تشویق می‌کنم که صحبت کنم و از اشتباهات خود ایثانی نداشته باشم.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	۴۱. وقتی در کاربرد انگلیسی خوب عمل می‌کنم احساس شغف و غرور می‌کنم.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	۴۲. من به تأثیرات روحی در خودم که ممکن است بر یادگیری انگلیسی تأثیر بگذارد توجه می‌کنم.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	۴۳. من دفتر یادداشتی دارم که در آن احساسات خود را در روند یادگیری زبان ثبت می‌کنم.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	۴۴. من با دوستان خود درباره احساساتی که هنگام مطالعه زبان انگلیسی دارم صحبت می‌کنم.

قسمت ۶. یادگیری به همراه دیگران

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	۴۵. وقتی کسی در حال صحبت کردن به زبان انگلیسی است و من متوجه منظور او نمی‌شوم از او می‌خواهم که با سرعت کمتر صحبت کند یا مطلبی را که من متوجه نشده‌ام تکرار کند.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	۴۶. من از انگلیسی‌زبانها یا معلم خود می‌خواهم که اشتباهات مرا در هنگام صحبت کردن تصحیح کنند.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	۴۷. آمورخته‌های انگلیسی خود را با زبان‌آموزان دیگر تمرین می‌کنم.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	۴۸. در صورت نیاز از انگلیسی‌زبانان یا معلم خود برای رفع سؤالات خود درخواست کمک می‌کنم.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	۴۹. سؤالات خود را به زبان انگلیسی می‌پرسم.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	۵۰. سعی می‌کنم که با فرهنگ جامعه انگلیسی‌زبانان آشنایی پیدا کنم.

۹. سعی می‌کنم برای به خاطر سپردن کلمه جدید جایی را که نخستین بار آن را هرگز به ندرت گاهی معمولاً همیشه دیدم (مثلاً در صفحه کاغذ، تابلو کلاس یا علائم خیابانی) به خاطر بسپارم.

قسمت ب. استفاده از فرایندهای ذهنی

۱۰. کلمات جدید را چند بار نوشته یا برای خود به طور شفاهی تکرار می‌کنم.
۱۱. سعی می‌کنم به هنگام صحبت به زبان انگلیسی هر چه بیشتر شبیه انگلیسی زبانها صحبت کنم.
۱۲. تولید اصوات انگلیسی را تمرین می‌کنم.
۱۳. کلماتی را که فراگرفته‌ام به طرق و در شرایط متفاوت به کار می‌برم.
۱۴. بر حسب مورد مکالمات را به زبان انگلیسی شروع می‌کنم.
۱۵. برنامه‌های تلویزیونی یا فیلمهای سینمایی به زبان انگلیسی را می‌بینم.
۱۶. برای تفریح کتابهایی را که به زبان انگلیسی نوشته شده‌اند می‌خوانم.
۱۷. یادداشت، پیغام، نامه، یا گزارش به زبان انگلیسی می‌نویسم.
۱۸. برای خواندن متن به زبان انگلیسی نخست یک بار رئوس مطالب را سریع می‌نگرم، سپس به اول متن بر می‌گردم و این بار آن را دقیق مطالعه می‌کنم.
۱۹. برای یادگیری بهتر کلمه جدید دقت می‌کنم که آیا در زبان مادری‌ام کلماتی مشابه و هم‌ریشه با آن یافت می‌شود یا نه.
۲۰. سعی می‌کنم که قواعد و الگوهای دارای شمول عام انگلیسی را پیدا کنم.
۲۱. سعی می‌کنم که معنی هر کلمه را با تقسیم کردن آن به واحدهای کوچک‌تر سازنده آن (مثلاً پیشوند و پسوند) دریابم.
۲۲. سعی می‌کنم که از تطابق یا ترجمه کلمه به کلمه زبان انگلیسی به زبان مادری خود و بالعکس اجتناب کنم.
۲۳. از آنچه به زبان انگلیسی می‌شنوم یا می‌خوانم خلاصه برداری می‌کنم.

قسمت ج. استفاده از روش‌های جبرانی

۲۴. وقتی به کلمه‌ای جدید بر می‌خورم سعی می‌کنم معنی آن را حدس بزنم.
۲۵. در حال خواندن متن به زبان انگلیسی، برای هر کلمه جدید، مرتباً به کتاب فرهنگ لغت مراجعه نمی‌کنم.
۲۶. در حال صحبت کردن به زبان انگلیسی، سعی می‌کنم پیش‌بینی کنم که بعد مخاطب چه مطلبی را بیان خواهد کرد.
۲۷. در مکالمه به زبان انگلیسی وقتی کلمه‌ای را به یاد نمی‌آورم از حرکات بدنی (مثل حرکت دست و پا یا تغییر چهره) برای تفهیم مطلب استفاده می‌کنم.
۲۸. هرگاه کلمه مورد نیاز به ذهن نیامد کلمه‌ای از خود می‌سازم.
۲۹. هرگاه کلمه مورد نیاز به ذهن نیامد کلمه یا عبارت کمابیش هم‌معنی آن را به کار می‌برم.

قسمت د. سازماندهی و ارزیابی یادگیری

۳۰. سعی می‌کنم تا آنجا که ممکن است موقعیتهایی را پیدا کنم که بتوانم در آنها آموخته‌های انگلیسی خود را به کار ببرم.
۳۱. به اشتباهات خود حساسم و سعی می‌کنم از دانش خود هرچه بهتر استفاده کنم تا اشتباهاتم را به حد اقل برسانم.

- Rubin, J., 1987. Learner strategies: theoretical assumptions, research history and typology", in A. Wenden & J. Rubin (eds.), *Learner strategies in language learning*. London, Prentice- Hall International.
- Selinker, L., 1972. "Interlanguage", *IRAL*, 10.
- Skehan, P., 1989. *Individual differences in second-language learning*, London, Edward Arnold.
- Sternberg, R.J., 1983. "Criteria for intellectual skills training", *Educational Research*, 12 (2).
- Tarone, E., 1983. "Some thoughts on the notion of 'communication strategy' ", in C. Faerch & G. Kasper (eds.), *Strategies in interlanguage communication*, London, Longman.
- Wenden, A. L., 1998. "Metacognitive knowledge and language learning", *Applied Linguistics*, 19(4).
- Wenden, A. L. & Rubin, J., 1987. *Learning Strategies in language learning*, Englewood Cliffs, NJ, Prentice Hall.
- Willing, K., 1985. *Helping Adults Develop their language strategies*. Sydney: Adult Migrant Education Service.

APPENDIX

بسمه تعالی

پرسشنامه روش یادگیری زبان انگلیسی

هدف از پرسشنامه روش یادگیری زبان انگلیسی کشف این نکته است که شما چگونه زبان انگلیسی را یاد می‌گیرید و چگونه می‌توان یادگیری شما را بهبود بخشید. لطفاً هر یک از جمله‌های زیر را به دقت بخوانید و سپس با گذاشتن علامت ضربدر در مربع مربوط به گزینه مناسب (هرگز، به ندرت، گاهی، معمولاً، همیشه) مشخص کنید که زبان انگلیسی را عملاً چگونه یاد می‌گیرید.

قسمت الف. به خاطر سپردن مطالب

- | | |
|--|--|
| هرگز به ندرت گاهی معمولاً همیشه | ۱. من بین مطالب جدید انگلیسی و مطالب مربوطه‌ای که قبلاً یاد گرفته‌ام ارتباط برقرار می‌کنم. |
| <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | ۲. برای به خاطر سپردن کلمات جدید آنها را در جمله به کار می‌برم. |
| <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | ۳. برای به خاطر سپردن بهتر کلمات جدید سعی می‌کنم در صورت امکان با الهام از معنی آنها تصاویری را که بتوانند یاد آورنده کلمات باشند در ذهن خود مجسم کنم. |
| <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | ۴. برای به خاطر سپردن کلمات جدید سعی می‌کنم که در ذهن خود مناسبی را که ممکن است کلمات در آن به کار روند تصویر کنم. |
| <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | ۵. برای به خاطر سپردن کلمات جدید آنها را به صورت شعرگونه ردیف می‌کنم و سپس یاد می‌گیرم. |
| <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | ۶. از کارتهای فیش‌نویسی برای به خاطر سپردن کلمات جدید استفاده می‌کنم. |
| <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | ۷. من کاری را که کلمه‌های جدید انگلیسی بیانگر آنند عملاً انجام می‌دهم تا بتوانم آنها را به خاطر بسپارم. |
| <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | ۸. مطالب فرا گرفته را غالباً مرور می‌کنم. |
| <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |

- Devine, J., Railey, K., & Boshoff, P., 1993. "The Implications of Cognitive Models in L1 and L2 Writing", *Journal of Second Language Writing* 2: 203-225.
- Ehrman, M. E. & Oxford, R. L., 1990. "Adult language learning styles and strategies in an intensive training setting", *Modern Language Journal*, 7.
- Gass, S.M. & Schachter, J., 1990. *Language perspective on second language*, Cambridge, Cambridge University Press.
- Graham, S., 1997. "Effective language", Clevedon, Avon, *Multilingual Matters*.
- Gu, Y. & Johnson, R.K., 1996. "Vocabulary learning strategies and language learning outcomes", *Language Learning*, 46(4).
- Hartnett, D. 1974. "The Relation of Cognitive Style and Hemispheric Preference to Deductive and Inductive Second Language Learning", Paper presented at UCLA conference on Human Brain Function, Los Angeles.
- Kasper, L. F. 1997. *Assessing the metacognitive growth of ELS student writers*, Kingsbough Community college.
- Keefe, J. W. & Monk, J. S., (with Letteri, C. A., Languis, M., & Dunn, R.), 1989. *Learning Style Profile*. Reston, VA: National Association of Secondary School Principals.
- Lessard-Clouston, M., 1997. *Language Learning Strategies: an overview for L2 teachers*, Kwansai Gakuin University, Nishonomiya, Japan.
- Littlewood, W., 1984. *Foreign and Second Language Learning*, Cambridge University Press.
- Myers, I. B. & McCaulley, M.H. 1985. *A Guide to the Use of the Myers-Briggs Type Indicator*, Palo Alto, CA: Consulting Psycholinguists Press.
- Nisbet, J. & Shucksmith, J. 1986. *Learning Strategies*, Chapman and Hall, Inc., New York.
- O'Malley, J. M. & Chamot, A. U. 1990. *Learning Strategies in Second Language Acquisition*, Cambridge: Cambridge University Press.
- O'Malley, J. M., Chamot, A. U., Stewner-Manzanaraes, G., Kupper, L. & Russo, R., 1985. "Learning strategy application with students of English as a second language", *TESOL Quarterly*, 19 (3).
- Oxford, R. L., 1989. "Use of language learning strategies: Synthesis of studies with implications for strategy training", *System*, 17.
- Oxford, R. L., 1990. *Language learning strategies: What every teacher should know*, New York, Newbury House.
- Oxford, R. L., 1992/1993. "language learning strategies in a nutshell: Update and ESL Suggestion", *TESOL Quarterly*, 2 (2).
- Oxford, R. L., 1993. "Instructional implication of gender differences in language learning styles and strategies", *Applied Language Learning*, 4.
- Oxford, R. L., 1996. *Language learning strategies around the world: Cross-cultural Perspectives*, Honolulu: University of Hawaii, Second Language Teaching and Curriculum Center.
- Oxford, R. L. & Burry, J. A. 1993. "Evolution, norming and psychometric testing of Oxford's strategy inventory for language learning", Paper presented at the National Council on Measurement in Education, Atlanta, GA.
- Oxford, R. L. & Ehrman, M. E. 1995. "Adults' language learning strategies in an intensive foreign language program in the United States", *System*.
- Pearson, E., 1988. "Learner strategies and learner interviews", *ELT Journal*, 42 (3).
- Resnick, L. & Beck, I. L., 1976. "Designing instruction in reading: Interaction of theory and practice", in J. T. Guthrie (ed.), *Aspects of reading acquisition*, Md, John Hopkins University Press.
- Richard, J.C., 1990. *The language teaching matrix*. Cambridge, Cambridge University Press.

what follows, the subparts of the SILL are ordered on the basis of the proficient English students' scores on them. According to Oxford (1999), a score of 3.5 to 5.0 (on a five-point scale) is considered high, a score between 2.5 to 3.0 medium, and a score between 1.0 to 2.4 is low.

1. Metacognitive strategies = 3.53
2. Social strategies = 3.08
3. Compensation strategies = 3.02
4. Cognitive strategies = 2.93
5. Affective strategies = 2.61
6. Memory strategies = 2.51

As is clear, metacognitive strategies are the most preferred and memory strategies are the least preferred ones. Of course, the fact that metacognitive knowledge is necessary for successful language learning is not a new finding. For example, a study by Devine, Railey, and Boshoff (1993) highlighted the positive effect of metacognition on writing. And the positive relationship between metacognition and first and second language performance has already been demonstrated (Baker & Brown, 1984; Devine, 1993).

This last finding indicates that learners succeed when they want to; hence, classroom procedures intended to instill motivation in students and make them plan their own learning (use of diaries, for example) and monitor their own progress is as important as, if not more important than, any other factor in materials development and language teaching.

References

- Anderson, N. J., 1991. "Individual differences in strategy use in second language reading and testing", *The Modern Language Journal*, 75 (iv).
- Baker, L. & Brown, A., 1984. "Metacognitive skills and reading" in P.D. Pearson (ed.): *Handbook of reading research*, New York, Longman.
- Butter, J. W., 1977. *Research in education*, Prentice-Hall.
- Butterfield, E. C. & Belmont, J. M. 1977. "Assessing and improving the executive cognitive functions of mentally retarded people", in I. Bailer & M. Steinlicht (eds.), *Psychological issues in mental retardation*, Chicago, Aldine Press.
- Chamot, A. & O'Malley, M., 1994. *The CALLA Handbook: implementing the cognitive academic language learning approach*, Reading, MA, Addison Wesley.
- Cohen, A., 1990. *Language Learning: insights for learners, teachers, and researchers*, Rowley, MA, Newbury House.
- Devine, J., 1993. "The role of metacognition in second language reading and writing", in J.G. Carson & I. Leki (eds.), *Reading in the composition classroom: second language perspectives* (pp. 105-127), Boston, Heinle and Heinle.

one hand, and the one between the proficiency of all the three groups together and their strategy use, on the other, are all too low to matter.

DISCUSSION

When we compared the performance of the students in five fields of study (Medicine, Engineering, Social Sciences, the Humanities, and English) on the SILL, a significant difference was found in strategy use between the students across the fields of study. Further analysis revealed that only English students were significantly different from the students in the other fields and there was no significant difference between the students in the other four fields.

And when we compared the performance of males and females within each field of study and on the whole regardless of their field study, no significant difference was found in either case.

The results so far seem to suggest that when developing ESL materials we should, from the strategy-teaching point of view, incorporate into our materials those strategies that are preferred by students in the English field. Furthermore, the findings seem to imply that when preparing ESP materials we should not differentiate between the fields of study in terms of LLS; in fact, even here we should follow the same trend as we do when concerned with ESL materials production in general. Also, since no significant difference was found in strategy use between males and females both within and across the fields of study, materials prepared for males can be used, as they are, for females as far as strategy teaching is concerned.

This study also revealed that the superiority of English students in strategy use over the students in the other fields was not due to their higher level of language proficiency in that the correlation coefficient between strategy use and language proficiency turned out to be only 0.24. To account for the superiority, we can possibly hypothesize that the different strategy-use behaviour of the students of English is due to some sort of mentality or mind set that attracts them to the field of English and makes them apt for language learning. This claim, of course, implies that the SILL questionnaire is at best an aptitude-measuring device. It follows that the preparation of tests to measure language aptitude should go hand in hand with strategy-use measurement.

Finally, if we assume that the best language learners are those who are prepared for the task and have shown signs of success in their field, then a successful language learner, successful in terms of strategy use, would be one who uses the same strategies employed by proficient students of English. In

Table 7. T-test for Comparison of Male and Female Student within Each Field

Group	t-observed	t-critical
M4	0.34	2.00
E4	0.64	2.00
S4	0.59	2.02
H4	1.75	2.02
EN4	0.65	2.00

As the statistics in Tables 6 and 7 show, no significant difference in strategy use between males and females was found both across and within the fields of study.

To test the second hypothesis, that is, to find out if strategy use and language proficiency are related, the subjects who had taken the TOEFL test, namely, the students in the fields of medicine, engineering, and English were, on the basis of their TOEFL scores, divided into three groups (*Weak* = those who had answered up to 34% of the TOEFL questions correctly, *Moderate* = those who had gotten right 35% to 69% of the questions, *Advanced* = those who had gotten 70% or over 70% of the questions right), and then correlational analysis was applied to the statistics obtained for each group. The correlation between strategy use and language proficiency for the whole sample regardless of proficiency level was also calculated. Table 8 below presents the results.

Table 8. Correlation between the Weak, Moderate, and Advanced Groups' TOEFL Score and their Performance on the SILL

	SILL	TOEFL
TQ for Weak sig. (2-tailed)	1.000	-0.037 0.913
TQ for Moderate sig. (2-tailed)	1.000	0.037 0.777
TQ for Advanced sig. (2-tailed)	1.000	-0.058 0.633
TQ for Whole Group sig. (2-tailed)	1.000	0.241*
TOEFL	0.241	1.000

TQ=Total Score on the Questionnaire (SILL)

* Correlation is significant at 0.05

As you see, the correlation coefficients representing the degree of the relationship between each group's proficiency level and its strategy use, on the

Table 5. The Tukey Test-Multiple Comparisons

(I) group	(J) group	Mean Diffetence (I-J)	Std. Error	Sig.
S4	H4	3.0509	5.7897	0.985
	EN4	-23.4701*	6.0799	0.001
	M4	-6.0385	5.2019	0.774
	E4	-6.6885	5.4192	0.731
H4	S4	-3.0509	5.7897	0.985
	EN4	-26.5210*	5.9013	0.000
	M4	-9.0894	4.9920	0.361
	E4	-9.7394	5.2180	0.336
EN4	S4	23.4701*	6.0799	0.001
	H4	26.5210*	5.9013	0.000
	M4	17.4316*	5.3258	0.009
	E4	16.7816*	5.5382	0.021
M4	S4	6.0385	5.2019	0.774
	H4	9.0894	4.9920	0.361
	M4	-17.4316*	5.3258	0.009
	E4	-0.6500	4.5571	1.000
F4	S4	6.6885	5.4192	0.731
	H4	9.7394	5.2180	0.336
	EN4	-16.7816*	5.5382	0.021
	M4	0.6500	4.5571	1.000

* The mean difference is significant at 0.05 level.

A cursory look at the table clearly demonstrates that the English students outperformed the students in all the other fields. As you see there was no significant difference between M4, E4, S4, and H4 students.

Also, in order to find out if there was any significant difference in strategy use between males and females across and within the fields of study, the *t-test* procedure was used and the tables below were obtained:

Table 6. T-test for Comparison of Male and Female Students in General

	Levene's Test for Equality of Variances		T-test for Equality of Means				
	F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
total (equal variances assumed)	0.000	0.993	0.318	286	0.751	1.0849	3.4164

strategy use and such variables as field of study and sex, the following table was obtained:

Table 2. Tests of Between-Subjects Effects for LLS, Field of Study, and Sex (Fourth-year Students)

Source	Sum of Squares	df	Mean Squares	F	Sig
Group	16405.539	4	4101.385	5.242	0.000
Sex	458.898	1	458.898	0.586	0.444
Group *Sex	4059.172	4	1014.793	1.297	0.271
Error	217521.136	278	782.450		
Corrected Total	240237.944	287			

* The mean difference is significant at 0.05.

As Table 2 suggests, there seems to exist a statistically significant difference in strategy use and field of study, and the variable *sex* does not affect the result. Of course, if the interaction of *field* and *sex* turned out to be statistically significant, this was actually because of the effect of *field* rather than *sex* (compare the mean scores in Tables 3 and 4 below).

Table 3. Mean Scores of the Fields on the SILL

Group	Mean
S4	94.361
H4	93.068
EN4	119.765
M4	101.139
E4	102.829

S4 = Fourth-year Students of Social Sciences

H4 = Fourth-year Students of the Humanities

EN4 = Fourth-year Students of English

M4 = Fourth-year Students of Medicine

E4 = Fourth-year Students of Engineering

Table 4. Mean Scores of Both Sexes on the SILL

Sex	Mean
Male	101.82
Female	100.37

Then, to determine where the difference between the fields lay, the Tukey test was applied and the information in the following table was obtained:

- Part A: Memory Strategies, 9 items
- Part B: Cognitive Strategies, 14 items
- Part C: Compensation Strategies, 6 items
- Part D: Metacognitive Strategies, 9 items
- Part E: Affective Strategies, 6 items
- Part F: Social Strategies, 6 items

It should finally be mentioned that the SILL was translated into Persian and then given to the subjects in this study. The SILL was translated because most of the students in this project studied subjects other than English, so they were highly unlikely to understand the SILL in its original English version. (The translated version of the SILL is attached to the article.)

2. The TOEFL test. The TOEFL test used in this study was a previously-administered test released by the Educational Testing Service (ETS) in 1998. The test employed in the present project comprised three sections: *Listening Comprehension*, *Structure and Written Expression*, and *Reading Comprehension*.

DESIGN

This project was implemented on the basis of the ex post facto design (Best, 1977). The design is schematically represented as follows:

G1	T1
G2	T2

G1 and G2 = The groups used in the study

T1 and T2 = The measures used in the study

DATA ANALYSIS

To test the hypotheses of the study, the following statistical procedures were utilized:

1. A two-way ANOVA was run to determine if there was any significant difference in strategy use between students across the different fields of study and to find out if the variable *sex* affected the relationship.
2. The t-test procedure was used to find out if there was any significant difference in strategy use between males and females within each field of study.
3. The Pearson-Product-Moment Correlation was used to find out if there was any relationship between strategy use and language proficiency.

RESULTS

When a two-way ANOVA was run to investigate the relationship between

3. Social Sciences (44 students)
4. The Humanities (50 students)
5. English Literature (41 students)

Due to certain limitations, the subjects in this study, like those in almost all other research studies, were not randomly selected; in fact, intact classes were randomly selected. And differences in the total number of students in the fields of study under investigation were because of difference in class size that was in turn the result of registration patterns.

Instrumentation

In order to measure the subjects' use of LLS and their language proficiency, the following two measures were used, respectively.

1. **The Strategy Inventory for Language Learning (SILL)**. Developed by Oxford (1989, 1990), this questionnaire is now translated into Arabic, French, Chinese, German, Japanese, Korean, Russian, Spanish, Thai and Ukrainian (See Oxford & Burry, 1993). It has an 80-item version for English speakers learning a foreign language and a 50-item version for learners of English as a second or foreign language (Oxford & Ehrman, 1995). As reported by Oxford and Ehrman (1995), the SILL's reliability using Cronbach's alpha (corrected by Spearman-Brown formula) is ordinarily in the range of 0.90s. The 80-item version of the SILL correlates in the 0.40s with the learning style profile or LSP (Keefe & Monk, with Letteri, Languis & Dunn, 1989) and the choice of strategies on this version of the SILL is significantly influenced by personality type, which is measured through the Myers-Briggs Type Indicator of MBTI (Myers & McCaulley, 1985), and motivation (self-ratings) in analyses of variance – thus providing evidence of concurrent and construct validity. The shorter form of the SILL, for use by people learning English as a second or foreign language, has strong predictive and concurrent validity as related to language performance and sensory preference (Oxford & Ehrman, 1995). The SILL asks students to react to a series of strategy descriptions (for example, "I make associations between new material and what I already know") in terms of how often they use the strategies (*always* or *almost always*, *generally*, *sometimes*, *generally not*, *never* or *almost never*).

In fact, the *Strategy Inventory for Language Learning* (SILL) is designed to gather information about how students of a foreign or second language go about learning that language. The 50-item version of the SILL, like the 80-item one, used in this study includes 6 parts as outlined below:

control and autonomy of learning on the part of the learner through LLS. Cohen (1990) insists that only conscious strategies are LLS, and that there must be a choice involved on the part of the learner. Transfer of a strategy from one language or language skill to another is a related goal of LLS, as Pearson (1988) and Skehan (1989) have discussed. In her teacher-oriented text, Oxford (1990) summarizes her view of LLS by listing twelve key features. In addition to the characteristics noted above, she states that LLS:

- allow learners to become more self-directed
- expand the role of language teachers
- are problem-oriented
- involve many aspects, not just the cognitive
- can be taught
- are flexible
- are influenced by a variety of factors. (Oxford, 1990, p.9)

Variables Affecting One's Choice of LLS

One's choice of language learning strategies is said to be affected by various factors such as 1. career orientation or field of study; 2. sex; 3. language proficiency; 4. psychological type; and 5. learning styles (Ehrman & Oxford, 1989 & 1990; Lessard-Clouston, 1997; Wenden, 1988).

Now with regard to the fact that LLS seem to play an important role in language learning (Graham, 1997; O'Malley & Chamot, 1990; Oxford, 1990) and that such strategies are said to be influenced by the afore-said variables, the present study was designed to test the following two hypotheses:

Hypothesis 1: There is no relationship between LLS and one's field of study, on the one hand, and sex, on the other.

Hypothesis 2: There is no relationship between LLS and language proficiency.

METHOD

Subject

Subjects were 288 male and female Iranian students of different ages studying different branches of knowledge at different universities in Tehran, Iran in the fall semester of the year 2001.

As to their field of study, the subjects in this project were of five different fields of study as follows:

1. Engineering (68 students)
2. Medicine (85 students)

Another categorization which is commonly referred to in the literature is the one presented by Oxford (1990). Oxford's list is a fairly detailed one that includes almost all of what others have mentioned in this respect. First, Oxford (1990) distinguishes between direct LLS, which directly involve the subject matter, i.e. the L2 or FL and indirect LLS, which "do not directly" involve the subject matter itself, but are essential to "language learning nonetheless" (p.71). Second, each of these broad kinds of LLS is further divided into LLS groups.

Oxford outlines three main types of direct LLS, for example. Memory strategies aid in entering information into long-term memory and retrieving information when needed for communication. Cognitive LLS are used for forming and revising internal mental models and receiving and producing messages in the target language. Compensation strategies "are needed to overcome any gaps in knowledge of the language" (Oxford, 1990, p.71). Oxford (1990) also describes three types of indirect LLS. Metacognitive strategies help learners exercise executive control through planning, arranging, focusing, and evaluating their own learning. Affective LLS enable learners to control feelings, motivations, and attitudes related to language learning. Finally, social strategies "facilitate interaction with others, often in a discourse situation" (Oxford, 1990).

Characteristics of LLS

As stated earlier, although the terminology is not always uniform, with some writers using the term 'learner strategies' (Wenden & Rubin, 1987), others 'learning strategies' (Chamot & O'Malley, 1994; O'Malley & Chamot, 1990), and still others 'language learning strategies' (Oxford, 1990, 1996), as Lessard-Clouston (1997) puts it, there are a number of basic characteristics in the generally accepted view of LLS. First, LLS are learner generated; they are steps taken by language learners. Second, LLS enhance language learning and help develop language competence as reflected in the learner's skills in listening, speaking, reading, or writing the L2 or FL. Third, LLS may be visible (behaviours, steps, techniques, etc.) or unseen (thoughts, mental processes). Fourth, LLS involve information and memory (vocabulary knowledge, grammar rules, etc.) Anderson, 1991; Gu & Johnson, 1996; Kasper, 1997; Lessard-Clouston, 1997; Oxford & Ehrman, 1995; Wenden, 1998).

Of course, as Lessard-Clouston (1997) argues, a number of further aspects of LLS are less uniformly accepted. For example, when discussing LLS, Oxford (1990) and others such as Wenden and Rubin (1987) note a desire for

developing communicative ability. (p.18)

Kinds of Language Learning Strategies (LLS)

Different scholars have presented different dichotomies for learning strategies. Resnick and Beck (1976) talked about *general strategies* and *mediational strategies*. By the former they meant broad activities connected with reasoning and thinking and by the latter they meant the specific skills or 'tricks' that we use when completing a task.

Sternberg (1983) is more specific. He distinguishes between *executive skills* – the kinds of skills used in planning, monitoring and revising strategies for task performance – and *non-executive skills* – the skills used in actually carrying out task performance. As Nisbet and Shucksmith (1986) explain:

...examples of executive skills would include problem identification, monitoring problem solutions, being sensitive to feedback and so on... the lower-order non-executive skills are represented by activities like 'mapping' and 'comparison'. (p.27)

Butterfield and Belmont (1977) have used a similar distinction. They referred to *control processes* and *executive functions*. To them, the control processes are the operations by which we work upon the information available, or retrieve it from memory in order to perform a cognitive task. By contrast, the executive function is the means by which we select, sequence, evaluate, revise or abandon these operations. Thus, as Butterfield and Belmont (1977) put it, control processes are the goal-directed tactics of cognition; their deployment is the objective outcome of executive planning and revision.

Nisbet and Shucksmith (1986) list six of the strategies that are commonly mentioned by different scholars, though they are often found under different names.

Table 1. A List of Commonly Mentioned Strategies

a. Asking Questions	Defining hypotheses. Establishing aims and parameters of a task, discovering audience, relating task to previous work, etc..
b. Planning	Deciding on tactics and timetables, reduction of task or problem into components: what physical or mental skills are necessary?
c. Monitoring	Continuous attempt to match efforts, answers and discoveries to initial questions or purposes.
d. Checking	Preliminary assessment of performance and results.
e. Revising	May be simple re-drafting or re-calculation or may involve setting of revised goals.
f. Self-testing	Final self-assessment both of results and performance on task.

foreign language learners do not. Not only is success in adult foreign language learning not guaranteed, but complete success is extremely rare, or perhaps even nonexistent (Selinker, 1972). In fact, among adults, there is substantial variation in the degree of success, even when age, exposure, instruction, and so forth are held constant (Gass & Schachter, 1989). Adults not only generally do not succeed, they also fail in different degrees.

The lack of general guaranteed success among adults seems to indicate that no teaching method is significantly better than or superior to any other method (Hartnett, 1974; Richards, 1990). That is why in recent times many researchers have turned their attention to what learners do to achieve successful learning, or *learner strategies* (Kasper, 1997; Littlewood, 1984; Nisbet & Shucksmith, 1986; Oxford, 1985; Richards, 1990; Wenden, 1998). Prompted by the awareness that learners may succeed despite the teachers' methods and techniques rather than because of them, researchers as well as teachers have begun to look more closely at learners themselves in an attempt to discover how successful learners achieve their results (O'Malley et al., 1985; Willing, 1985).

As put by Richards (1990), studies of learner strategies attempt to identify the specific techniques and strategies learners use to facilitate their own learning (Oxford, 1985; Wenden, 1988). The focus is on the particular cognitive operations, processes, procedures, and heuristics that learners apply to the task of learning a second language. Given any language learning task, such as understanding a lecture, reading a text, writing a composition, understanding the meaning of a new grammatical or lexical item, or preparing a written summary of a text, a number of strategies are available to a learner to help carry out the task. But how can we define the strategies that learners employ?

Within ESL/EFL education, a number of definitions of learning strategies have been used by key figures in the field. Early on, Tarone (1983) defined a learning strategy as "an attempt to develop linguistic and sociolinguistic competence in the target language – to incorporate these into one interlanguage competence" (p.67). Rubin (1987) later wrote that learning strategies are "strategies which contribute to the development of the language system which the learner constructs and affect learning directly" (p.22). In their study, O'Malley and Chamot (1990) defined learning strategies as "the special thoughts or behaviours that individuals use to help them comprehend, learn, or retain new information" (p.1). Finally, Oxford (1992, 1993) provides the following definition:

... language learning strategies – specific actions, behaviours, steps, or techniques that students (often intentionally) use to improve their progress in developing L2 skills. These strategies are tools for the self-directed involvement necessary for

The Relationship Between Language Learning Strategies and Major Fields of Study, Sex, and Language Proficiency

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(Abstract)

The study reported here was designed to investigate the relationship between language learning strategies and such variables as major fields of study, sex, and language proficiency. The data obtained from students in such diverse fields as medicine, engineering, social sciences, the humanities, and English seems to suggest that English students are significantly better in strategy use than students in other fields. However, students in fields of study other than English are not significantly different.

The results obtained in this study also indicate that there is no significant relationship between language learning strategies and variables such as sex, and language proficiency. This finding is different from that of others who have investigated the same relationship type in an ESL context.

When we analyzed the performance of the English students on the SILL (the Strategy Inventory for Language Learning) to find out what possibly forms the strategy preference of ideal language learners, we concluded that successful language learners are distinguished from others basically because they enjoy a high level of metacognitive knowledge of what they are doing. That is, such learners consciously set themselves realistic well-defined learning goals, evaluate their progress, and monitor their own performance at all stages of language learning.

THEORETICAL BACKGROUND

As stated by Gass and Schachter (1989), the lack of general guaranteed success is the most striking characteristic of adult foreign language learning. Normal children inevitably achieve perfect mastery of the language; adult