

Assessment of Language Learning Strategies Used by Palestinian EFL Learners

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Abstract: *This article assesses the language learning strategies (LLSs) used by 194 high school and 184 university English-as-a-foreign-language (EFL) learners in Palestine, using Oxford's (1990) Strategy Inventory for Language Learning (SILL). It also explores the effect of language proficiency and gender on frequency of strategy use. The findings show that proficiency level and gender have a main effect on overall strategy use, but their effects on the use of each of the six categories of strategies and individual strategies are variable. The findings have significant implications for research on LLSs, classroom instruction, materials design, and teacher preparation.*

Introduction

It is not uncommon to hear complaints voiced by second language (L2) teachers and educators about the “unsatisfactory” language performance of L2 learners. These complaints have motivated applied researchers in the field of L2 learning and teaching to try to diagnose the causes of this problem and recommend remedies. Until the 1970s, the majority of L2 research focused on the evaluation of competing teaching methods and instructional materials. However, since the early 1970s, great emphasis has been placed on the investigation of social, psychological, and affective variables that enhance or hamper L2 success and achievement. Among these variables are: motivation, attitudes, personality, learning styles, and learning strategies. Research, in general, has provided evidence that these variables correlate with success in L2 learning (See Dornyei, 1990; Ehrman & Oxford, 1990; Oxford & Cohen, 1992; Peng, 2001).

The observations made by L2 researchers about the differences in learning among L2 learners have motivated second language acquisition (SLA) researchers to explore the sources of these differences with the objective of providing instruction that facilitates learning. These differences were identified by researchers who tried to describe the characteristics of the “good language learner.” Chamot (1987), Naiman, Frohlich, Stern, and Todesco (1978), Rubin (1975), Stern (1975), and Stevick (1989) identified the strategies that successful language learners employ to facilitate learning the L2. For example, Rubin (1975) stated that the good language learner is a willing and accurate guesser, has a strong motivation to communicate, is often not inhibited, is prepared to attend to form, practices, monitors his own speech and the speech of others, and attends to meaning. On the basis of the findings of the above-mentioned studies, it was hypothesized that if less successful learners are taught how to use these types of strategies (i.e., if they learn how to learn), they become more effective and independent learners.

The description of the strategies used by successful language learners provided a stimulus for further research into the establishment of taxonomies of language learning strategies (LLSs). O'Malley and Chamot (1990) divided LLSs into three major types: cognitive, metacognitive, and social-affective. Oxford (1990), on the other hand, classified LLSs into six broad categories, namely memory, cognitive, compensatory, metacognitive, affective, and social. She defined LLSs as “specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations.” (p. 8). Because the present

study uses Oxford's taxonomy to assess LLSs used by Palestinian English-as-a-foreign-language (EFL) learners, it will be described in more detail. The selection of this taxonomy has been made on two grounds. First, it has been used to assess strategy use by EFL/English-as-second-language (ESL) learners from a large and varied group of language and cultural backgrounds (e.g., Arabic: Touba, 1992; Chinese: Chang, 1990; Hispanic: Green, 1991; Japanese: Watanabe, 1990). Second, its reliability and validity have been widely documented (see Oxford, 1992).

The purpose of the present study is to assess Palestinian EFL learners' use of LLSs and explore the effect of language proficiency level and gender on strategy use. These two variables are among the most studied factors that interact with frequency of strategy use. The majority of LLS studies have been conducted on learners of English in an L2 setting. The present study explores the effect of these two variables on the frequency of strategy use in an EFL setting.

Review of the Literature

The SILL instrument has been widely used in more than 15 studies involving EFL/ESL learners from many countries and cultural backgrounds, such as Hispanic, Egyptian, Jordanian, Chinese, Japanese, Thai, Indonesian, Korean, and Puerto Rican. (For a review of these studies, see Oxford, 1996). These studies used the SILL to measure strategy use and explored the effect of variables (e.g., gender, proficiency, motivation) on strategy use. Since the present study focuses on the effect of proficiency and gender, this review of the literature will be limited to studies that investigated these two variables.

A number of studies have investigated the relationship between language proficiency level and strategy use. Overall, these studies reported a positive relationship. More specifically, more proficient learners reported higher frequency of strategy use than did less proficient peers (Green & Oxford, 1995; Lan & Oxford, 2003; Oxford & Nyikos, 1989). For example, Oxford and Nyikos (1989) found that language self-ratings of language proficiency and years of study had a significant effect on strategy use. Similar results regarding the effect of years of study were reported by Ramirez (1986) for adolescent learners of French as an L2. Moreover, in his study of LLS use by Irish learners of German as an L2, Bruen (2001) found that greater strategy use was associated with higher levels of oral proficiency in German. Similarly, Lan and Oxford (2003) found significant effect for proficiency level on Taiwanese elementary school EFL learners' use of cognitive, compensatory, metacognitive, and affective strategies.

Besides language proficiency, gender has also received great attention as a variable that may account for variation in strategy use. Lan and Oxford (2003) found that girls surpassed boys in applying cognitive, compensatory, metacog-

nitive, and affective strategies. Watanabe (1990) also found that female EFL students at a Japanese university used more communication strategies than did male students. Sy (1994) also found that Chinese female EFL learners reported greater use of cognitive, metacognitive, and social strategies than males. Other studies (Chang, 1990; Green & Oxford, 1995; Kaylani, 1996; Oxford, 1993; Oxford & Nyikos, 1989; Oxford, Nyikos, & Ehrman, 1988) reported higher frequency of strategy use by females.

With regard to SILL research on LLS use by Arabic-speaking EFL learners, to the best of the researcher's knowledge, only two studies have been reported in the literature. Touba (1992) used an Arabic version of the SILL with 500 university students. The students reported high frequency of use of metacognitive and memory strategies and low use of cognitive strategies. On the other hand, Kaylani (1996) used an Arabic version of the SILL to assess strategy use by a sample of 255 high school seniors (12th graders) in Jordan. She also studied the effect of gender and motivation on strategy use. She found that "female students used significantly more memory, cognitive, compensatory and affective strategies than male students." (p. 84).

The purpose of the present study is to assess LLS use by two samples of Palestinian EFL learners at the secondary and postsecondary levels and to explore the effect of proficiency level and gender on reported strategy use. The present study differs from other SILL studies in that it collects data on strategy use from two groups of Arabic-speaking EFL learners whose proficiency level is determined on the basis of years of language study and who are studying English in two different academic foreign language settings. More specifically, the purpose of the present study is twofold: (a) to assess Palestinian EFL learners' use of LLSs on three SILL levels: overall use, use of each of the six categories of strategies, and use of individual strategy items; and (b) to explore the effect of language proficiency (measured by years of study) and gender on reported strategy use.

Method

Participants

Two groups of Palestinian EFL learners participated in this study, totaling 378 students. The first group consisted of 194 tenth graders at government schools in the Bethlehem area. The second group, on the other hand, were 184 freshman students enrolled in English 120, a lower-intermediate service course taken by students who scored 60 and above (out of 100) on the Bethlehem University English Entrance Examination, which is taken by all applicants and used for admission purposes. This exam consists of objective items that cover reading comprehension, grammar, vocabulary, and indirect measure of writing. Table 1 shows the distribution of participants by level and gender.

Table 1

DISTRIBUTION OF SUBJECTS BY PROFICIENCY LEVEL AND GENDER			
Proficiency Level	Gender		Total
	Women	Men	
High School	94	100	194
University	100	84	184
Total	194	184	378

It should be noted here that English in Palestine is a required subject taught at school as a foreign language rather than an L2. That is, it is not used for daily communication. At government schools, before the year 2000, pupils started learning English in the fifth grade, which means that they received eight years of EFL instruction before going to college. So, the sample of 10th graders studied English for six years, while the sample of freshmen students for eight-and-a-half years.

Instrument

Oxford (1990) designed the SILL Version 7.0 for use with EFL/ESL learners. It consists of 50 items that represent the six categories of strategies mentioned above. First, memory strategies help learners to remember and retrieve information through creating mental linkages, applying images and sounds, reviewing well, and employing action. Second, cognitive strategies help learners to understand and produce new language through practicing, receiving and sending information, analyzing and reasoning, and creating structure for input and output. Third, compensatory strategies enable learners to use the language despite gaps in their language knowledge through guessing intelligently, and overcoming limitation in speaking and writing. Fourth, metacognitive strategies allow learners to control their own learning through organizing, planning, and evaluating their learning. Fifth, affective strategies help learners to gain control over their emotions, attitudes, and motivations through lowering their anxiety, encouraging themselves, and taking their emotional temperatures. Six, and finally, social strategies help learners to interact with others through asking questions, and cooperating with others and empathizing with them.

An Arabic translation of Oxford's (1990) SILL Version 7.0 for ESL/EFL students was used to measure strategy use. This 50-item taxonomy covers six broad categories, each represented by a number of individual strategies (items).

Memory strategies (items 1–9)

Item 2: I use new English words in a sentence so I can remember them.

Item 7: I physically act out new English words.

Cognitive strategies (items 10–23)

Item 12: I practice the sounds of English.

Item 22: I try not to translate word-for-word.

Compensatory strategies (items 24–29)

Item 24: To understand unfamiliar words, I make guesses.

Item 27: I read English without looking up every new word.

Metacognitive strategies (items 30–38)

Item 30: I try to find as many words as I can to use my English.

Item 35: I look for people I can talk to in English.

Affective strategies (items 39–44)

Item: 39: I try to relax whenever I feel afraid of using English.

Item 43: I write down my feelings in a language learning diary.

Social strategies (items 45–50)

Item 46: I ask English speakers to correct me when I talk.

Item: 49: I ask questions in English.

Each of the 50 statements describes what learners generally do while learning an L2, and students are asked to indicate the extent to which each statement reflects or describes what they themselves do. They mark their responses on a 5-point Likert scale, with 1 = "Never or almost never true of me" and 5 = "Always or almost always true of me." (The SILL appears in the Appendix.)

The SILL was translated into Arabic to avoid any problems participants could encounter in understanding the items and response scales. The SILL translation process went through four stages: translation, assessment, editing, and pretesting. First, the researcher translated the SILL into Arabic, keeping as much as possible the referential meaning of the words. Second, the Arabic-translated version was assessed against the source version by an English–Arabic translator, who was requested to assess the textual quality of the translation in terms of appropriate translational equivalency. Third, the revised version was then checked by an Arabic linguist for naturalness, clarity, and smooth reading. Finally, the revised version was pretested by asking 10 tenth graders and 10 freshman students to complete the survey. Upon completion of the SILL, the respondents were invited to make any comments on the wording and clarity of the items and the response scales. In general, they expressed satisfaction.

Data Collection and Analysis

Participants completed the SILL in class in 25 minutes under the supervision of the regular class instructors under

conditions of anonymity and confidentiality. The participants also provided information about their age and gender. Reliability coefficient (Cronbach's α for internal consistency) for the whole SILL was .86.

Oxford (1996) noted that reliability "is determined with the whole instrument because the six categories are strongly correlated with the SILL mean (0.66–0.81) and moderately correlated with each other (0.35–0.61)" (p. 29).

A two-way analysis of variance (ANOVA) test was used to determine variation in the means of reported strategy use (dependent variable) across the entire SILL as well as that of each of the six categories of strategies by language proficiency level (school and university) and gender (independent variables).

Chi-square tests were used to measure variation in the use of each of the 50 individual strategies. Following Green and Oxford's (1995) statistical analysis of the SILL data through chi-square tests, responses 1 and 2 on the 5-point scale were collapsed into a "low strategy use" category and responses 4 and 5 into a "high strategy use" category in order to "obtain cell sizes with expected values high enough to ensure valid analysis" (p. 271).

Results and Discussion

Results of the data statistical analysis are presented in terms of variation in strategy use by proficiency level and gender under three headings: overall strategy use, use of each of the six categories of strategies, and use of individual strategy items.

Overall Strategy Use

The ANOVA results indicated a statistically significant main effect for proficiency level [$F(1,347) = 22.9, p < 0.05$.] and for gender [$F(1, 347) = 11.47, p < 0.05$]. Means for school and university students were 3.21 and 2.99, respectively. These figures demonstrate that university students reported significantly higher frequency of strategy use than did high school students. Both means fell within the medium range (2.5–3.4), which demonstrates that Palestinian EFL learners at high school and university report that they "sometimes use" language learning strategies. Learning English in a foreign language setting offers them very little exposure to authentic, real-life communication activities, which seems to limit their opportunities to use a variety of LLSs. It is worth noting that the discrepancy in reported strategy use shows that years of language study influence strategy use in a positive way. Put differently, strategy use increases with the increase of the demands that the high-proficient learners encounter while communicating in English. This result is consistent with that reported in other SILL studies (Dreyer & Oxford, 1996; Green & Oxford, 1995; Lan & Oxford, 2003; Oxford, 1996; Oxford & Ehrman, 1995). These studies showed that language

learning experience motivates learners to use more strategies that require planning and evaluation of learning.

As for gender differences, means for females and males were 3.18 and 3.02 respectively. These results show that female students reported significantly higher frequency of strategy use than did male students. The ANOVA, however, yielded no significant interaction between proficiency level and gender. This result is also consistent with that of other SILL studies (Ehrman & Oxford, 1989; Green & Oxford, 1995; Lan & Oxford, 2003; Oxford, 1995; Oxford et al., 1988; Oxford & Nyikos, 1989). For example, Lan and Oxford (2003) found that females surpassed males in the overall use of strategies.

Use of Each Strategy Category and Language Proficiency

A 2x2 ANOVA yielded significant variation in the use of five categories of strategies by proficiency level, namely memory, cognitive, compensatory, metacognitive, and social—all favoring university-level students. This means that university students reported higher frequency of use of these five categories than did high school students. This demonstrates that the longer duration of language study positively influences learners' use of strategies. However, there was no significant difference between secondary and postsecondary students in their use of affective strategies, which means that EFL learners, regardless of their proficiency level, report similar frequencies of use of affective strategies. Examples of affective strategies are: Item 41 "I give myself a reward or treat when I do well in English," and Item 44 "I talk to someone else about how I feel when I am learning English." The findings also showed that the mean for each of the six categories fell within the medium range of use by school students. However, university students reported a high frequency of use of metacognitive strategies. This shows that as students get older and their language proficiency advances, their use of metacognitive strategies, which relate to planning, organization, and evaluation of learning, increases. In other words, they develop better learning skills. These results are summarized in Table 2.

The figures in Table 2 show that the means for all categories for males and females, with the exception of metacognitive strategies used by females, fell within the medium range of strategy use (i.e., 2.5–3.4).

Table 3 shows the rank ordering of the frequency of the six categories by proficiency level. From the figures in Table 3, we notice that for both high school (12th graders) and freshman university students, metacognitive and social strategies ranked highest and next to highest. Examples of social strategies are: Item 48 "I ask for help from English speakers," and Item 50 "I try to learn about the culture of English speakers." We also notice that only the mean for

Table 2

ANOVA RESULTS REGARDING SIGNIFICANT VARIATION IN USE OF CATEGORIES OF STRATEGIES BY PROFICIENCY LEVEL

SILL Category	School		University		F(1,372)	p	Comments
	M	SD	M	SD			
Memory	2.85	.55	2.97	.54	4.52	$p < .05$	U > HS
Cognitive	2.88	.61	3.19	.52	28.15	$p < .001$	U > HS
Compensatory	2.87	.65	3.16	.66	17.99	$p < .001$	U < HS
Metacognitive	3.27	.67	3.58	.68	19.14	$p < .001$	U < HS
Affective	2.94	.66	2.93	.74	NS		
Social	3.17	.76	3.37	.77	6.54	$p < .05$	U < HS

Note. U = University; HS = High School

Table 3

RANK ORDERING OF FREQUENCY OF USE OF CATEGORIES OF STRATEGIES BY PROFICIENCY LEVEL

SILL Category	High School Mean	SILL Category	University Mean
1. Metacognitive	3.27	1. Metacognitive	3.58
2. Social	3.17	2. Social	3.27
3. Affective	2.94	3. Cognitive	3.19
4. Cognitive	2.88	4. Compensatory	3.16
5. Compensatory	2.87	5. Memory	2.97
6. Memory	2.85	6. Affective	2.93

metacognitive strategies used by university students fell within the high range of use.

Use of Each Strategy Category and Gender

With regard to the effect of gender on the use of the six categories of strategies, the ANOVA indicated significant variation in the use of only two categories, namely memory (remembering and retrieving information) and metacognitive (planning and evaluation of learning), favoring female over male students. One possible explanation for this result is that females in general are better at planning and managing their learning than are males, which reflects a tendency towards more global learning. Green and Oxford (1995) arrived at similar results regarding strategy use by female Puerto Rican ESL students, who reported higher frequencies for memory and metacognitive strategies. Kaylani (1996), however, found that there was no significant variation in strategy use by Jordanian EFL 12th graders due to gender in the use of metacognitive and social strategies. These discrepant results may be the result of comparing SILL studies that collected data from different L2 learners, at different proficiency levels, and in different language learning settings. These results are summarized in Table 4.

Table 5 shows the rank ordering of the frequency of use of the six categories of strategies by gender. The figures in Table 5 show that for both males and females, metacog-

nitive and social strategies ranked highest and next to highest. This result is similar to that reported in Table 3 for the effect of proficiency level. Moreover, as in the result of the proficiency effect, only the mean for metacognitive strategies falls within the high range of strategy use while the other categories of strategies fall within the medium range. This high range of strategy use reflects a desire on the part of EFL learners to manage their learning in a metacognitive way. Moreover, the fact that none of the six categories showed a low range of strategy use is encouraging in the sense that providing strategy-training activities for Palestinian EFL learners would help them develop a wide range of strategies and encourage them to transfer their use to new learning tasks and situations.

Use of Individual Strategies and Proficiency Level

The chi-square tests demonstrated that 32 (64%) out of the 50 SILL items showed significant variation in use by proficiency level, 29 (90.6%) favoring university students and only 3 (9.4%) favoring school students. Two of these three were memory strategies (Item 6: "I use flashcards to remember new English words," and Item 7: "I physically act out new English words") and the third was cognitive (Item 20: "I try to find patterns in English"). We notice that the two memory strategies are related to basic tactics that low-proficient students use to review new words. The

Table 4

ANOVA RESULTS REGARDING SIGNIFICANT VARIATION IN USE OF CATEGORIES OF STRATEGIES BY GENDER

SILL Category	School		University		F(1,372)	p	Comments
	M	SD	M	SD			
Memory	2.87	.57	2.95	.52	NS		
Cognitive	2.95	.56	3.12	.61	9.32	$p < .05$	F > M
Compensatory	2.95	.64	3.08	.68	NS		
Metacognitive	3.30	.67	3.55	.70	13.49	$p < .05$	F > M
Affective	2.86	.68	3.00	.71	NS		
Social	3.20	.71	3.33	.82	NS		

Note. F = Female; M = Male

Table 5

RANK ORDERING OF FREQUENCY OF USE OF CATEGORIES OF STRATEGIES BY GENDER

SILL Category	Male Mean	SILL Category	Female Mean
1. Metacognitive	3.30	1. Metacognitive	3.55
2. Social	3.20	2. Social	3.33
3. Compensatory	2.95	3. Cognitive	3.12
4. Cognitive	2.94	4. Compensatory	3.08
5. Memory	2.87	5. Affective	3.00
6. Affective	2.86	6. Memory	2.95

results show that university students, who have had more exposure to the language, reported high frequency of six cognitive, three compensatory, seven metacognitive, two affective, and three social strategies. This shows that the higher the proficiency, the greater the variety of the strategies used. High-proficient students also used a greater variety of strategies than did low-proficient students. Table 6 presents the chi-square results; the figures in this table show that years of study, in general, positively affect frequency of strategy use.

Use of Individual Strategies and Gender

The chi-square tests showed that of the 50 SILL items, 18 (36%) were used significantly differently by male and female students, 16 (88.9%) favored females and only 2 (11.1%) favored males. These two are memory strategies that involve the use of flashcards and physical action to remember new English words. Table 7 summarizes these results.

Conclusion

The findings reported above show that learner proficiency level and gender have a statistically significant effect on frequency of overall strategy use. With regard to their effect on the use of each of the six categories of strategies, proficiency level has a main effect on five categories, namely

memory, cognitive, metacognitive, compensatory, and social, in favor of university students. On the other hand, gender has a main effect on only two categories, namely memory and metacognitive, in favor of females. Finally, proficiency level has a main effect on the use of 32 of the individual strategies, 29 in favor of university students and 3 in favor of high school students. As for gender, it has a main effect on 18 of the individual strategies, 16 favoring females and 2 favoring males.

Implications and Recommendations

The findings of the present study have implications for research on strategies, classroom instruction, material design, and teacher preparation. First, the findings have shown variation in strategy use accounted for by the learner language proficiency level and gender. The explanation of these patterns can be facilitated by further exploration of the effect of other individual sociopsychological variables on strategy use. Among these variables are attitudes, motivation, personality type, learning style, L2 setting, and first language (L1) experience. Therefore, further research is needed on the strategic competence of Arabic-speaking EFL learners, which addresses the interaction between strategy use and the above variables. Moreover, future research should try to both complement self-report data with data collected by interviews, think-aloud protocols, diaries, and

Table 6

ITEMS SHOWING SIGNIFICANT VARIATION IN STRATEGY USE BY PROFICIENCY LEVEL

SILL Item	(4 or 5)		% High Use	
	HS	Univ.	Observed χ^2	Comment
(1) MEM: I think of relationships between what I already know and new things I learn in English.	26.3	38.5	20.09	U > HS
(2) MEM: I use new English words in a sentence so I can remember them.	32.0	39.6	10.50	U > HS
(3) MEM: I connect the sound of a new English word and an image or picture of the word to help me remember the word.	33.0	41.2	14.52	U > HS
(4) MEM: I remember a new English word by making a mental picture of a situation in which the word might be used.	36.1	54.9	13.80	U > HS
(6) MEM: I use flashcards to remember new English words.	21.6	8.8	16.15	HS > U
(7) MEM: I physically act out new English words.	25.3	17.6	6.63	HS > U
(9) MEM: I remember new English words or phrases by remembering their location on the page, on the board, or on a street sign.	49.0	60.4	8.88	U > HS
(11) COG: I try to talk like native English speakers.	40.2	57.7	19.97	U > HS
(12) COG: I practice the sounds of English.	35.6	46.2	6.50	U > HS
(13) COG: I use the English words I know in different ways.	35.6	49.5	15.08	U > HS
(14) COG: I start conversations in English.	30.9	53.3	28.5	U > HS
(15) COG: I watch English language TV shows spoken in English or go to movies spoken in English.	28.4	44.5	11.74	U > HS
(16) COG: I read for pleasure in English.	35.1	40.1	8.26	U > HS
(17) COG: I write notes, messages, letters, or reports in English.	21.6	39.0	18.89	U > HS
(18) COG: I first skim an English passage (read over the passage quickly) then go back and read carefully.	36.1	47.8	8.19	U > HS
(20) COG: I try to find patterns in English.	37.1	30.2	7.49	HS > U
(22) COG: I try not to translate word-for-word.	25.8	38.5	16.81	U > HS
(24) COMP: To understand unfamiliar words, I make guesses.	28.4	49.5	21.46	U > HS
(28) COMP: I try to guess what the other person will say next in English.	30.4	44.5	8.06	U > HS
(29) COMP: If I can't think of an English word, I use a word or phrase that means the same thing.	47.4	70.3	20.29	U > HS
(30) META: I try to find as many ways as I can to use my English.	42.8	68.1	25.49	U > HS
(31) META: I notice my English mistakes and use that information to help me do better.	50.0	69.2	14.39	U > HS
(32) META: I pay attention when someone is speaking English.	55.7	68.7	15.88	U > HS
(33) META: I try to find out how to be a better learner of English.	52.6	67.6	10.81	U > HS
(35) META: I look for people I can talk to in English.	35.1	52.2	12.23	U > HS
(37) META: I have clear goals for improving my English skills.	36.6	49.7	6.72	U > HS
(38) META: I think about my progress in learning English.	55.7	68.7	14.12	U > HS
(39) AFF: I try to relax whenever I feel afraid of using English.	38.1	52.2	7.63	U > HS
(40) AFF: I encourage myself to speak English even when I am afraid of making mistakes.	53.1	56.9	8.03	U > HS
(45) SOC: If I don't understand something in English, I ask the other person to slow down or say it again.	50.0	56.6	6.88	U > HS
(46) SOC: I ask English speakers to correct me when I talk.	32.0	46.7	11.10	U > HS
(49) SOC: I ask questions in English.	38.7	51.1	9.27	U > HS

Note. U = University; HS = High School

Table 7

ITEMS SHOWING SIGNIFICANT VARIATION IN STRATEGY USE BY GENDER

SILL Item	(4 or 5)		% High Use	
	F	M	Observed χ^2	Comment
(1) MEM: I think of relationships between what I already know and new things I learn in English.	37.6	26.4	10.13	F > M
(6) MEM: I use flashcards to remember new English words.	10.3	20.9	10.04	M > F
(7) MEM: I physically act out new English words.	16.5	26.9	7.45	M > F
(9) MEM: I remember new English words or phrases by remembering their location on the page, on the board, or on a street sign.	63.9	44.5	16.20	F > M
(11) COG: I try to talk like native English speakers.	52.1	45.1	8.30	F > M
(14) COG: I start conversations in English.	49.5	33.5	12.20	F > M
(20) COG: I try to find patterns in English.	42.8	24.2	14.54	F > M
(24) COMP: To understand unfamiliar English words, I make guesses.	46.4	30.2	10.62	F > M
(28) COMP: I try to guess what the other person will say next in English.	43.8	30.2	7.99	F > M
(29) COMP: If I can't think of an English word, I use a word or phrase that means the same thing.	66.5	51.1	9.16	F > M
(30) META: I try to find as many ways as I can to use my English.	64.9	44.5	17.23	F > M
(31) META: I notice my English mistakes and use that information to help me do better.	67.5	50.5	11.92	F > M
(32) META: I pay attention when someone is speaking English.	71.6	51.6	21.69	F > M
(37) META: I have clear goals for improving my English skills.	49.0	36.5	6.33	F > M
(38) META: I think about my progress in learning English.	70.6	52.7	12.86	F > M
(39) AFF: I try to relax whenever I feel afraid of using English.	52.1	37.4	9.36	F > M
(40) AFF: I encourage myself to speak English even when I am afraid of making mistakes.	62.4	46.2	10.29	F > M
(45) SOC: If I don't understand something in English, I ask the other person to slow down or say it again.	58.2	47.8	6.14	F > M

Note. U = University; HS = High School

dialog journals (Cohen, 1996), and assess strategies in actual language use situations (McDonough, 2002).

Second, the findings of the study have practical implications for L2 classroom instruction. Since the frequency of strategy use reported by Palestinian EFL learners at both high school and university generally falls within the medium range, a need arises for providing students with further opportunities to practice a wide variety of strategies that are appropriate to the different instructional tasks and activities that constitute an essential part of the classroom L2 learning experience. This cognitive process that accompanies strategy learning and practice raises students' awareness of developing their strategic competence described by Wenden (2001) as "general knowledge about what strategies are, specific knowledge about when and how to use them, and their effectiveness" (p. 36). It is worth noting that the goal of developing students' strategic competence can only be achieved if teachers are convinced that the effective use of strategies contributes to success and that

their provision of strategies-based instruction enhances students learning by empowering them to engage in self-directed, autonomous learning. Strong evidence exists for the effectiveness of strategies-based instruction. For instance, Cohen, Weaver, & Li (1995) concluded that "explicitly describing, discussing, and reinforcing strategies in the classroom can have a direct payoff on student outcomes." (p. 29). In a similar vein, Chamot, Barnhardt, El-Dinary, & Robbins (1999) reviewed intervention studies that tried "to teach language learning strategies and to measure their effects on students." (p. 167)

Third, the findings have implications for the design and development of instructional materials. The results about variation in strategy use by proficiency level can guide materials developers in their selection and incorporation of activities and tasks that target certain strategies. They can also benefit from strategy-based materials that have been developed by O'Malley and Chamot (1990), Ellis and Sinclair (1989) and Willing (1989). For example, Chamot

and O'Malley (1996) have developed materials based on the Cognitive Academic Language Learning Approach (CALLA), which advocated content-based instruction, academic-language development, and explicit instruction in learning strategies (1996, p. 167). Ellis and Sinclair (1989), on the other hand, highlighted the use of personal strategies, risk-taking strategies, and organization strategies. Willing (1989), who developed the Australian Migrant English Program (AMEP), focused on strategies that fostered managing the learning process and information.

Finally, to implement explicit strategies-based instruction, teachers need to receive training in strategy assessment and instruction. Training in strategy assessment involves showing teachers how to use multiple data collection methods (e.g., interviews, self-reports, think-aloud, diaries, journal dialog) to identify, describe, and classify the strategies currently used by their students. The involvement of students in strategy assessment activities heightens their strategic awareness, or "metacognition" (Chamot et al. 1999), and fosters their understanding of the value of the effective use of strategies for autonomous learning, which, ultimately, helps them gain greater control over their own learning.

Besides training in strategy assessment, teachers need training in delivering explicit strategies-based instruction, which involves teaching students to apply strategies to their language-learning process through regular classroom activities. This explicit strategies-based instruction can be incorporated into the English curriculum, which can be achieved by inserting strategies into the language instructional materials. Since the Palestinian Ministry of Education has embarked on developing new English textbooks for government schools, the curriculum designers and developers can benefit from the findings of this assessment of LLSs used by school students (both males and females) in preparing instructional materials and activities that are skill- and task-specific and that target students' strategy needs. Such materials and activities should take into consideration variation in strategy use that is due to both proficiency level and gender.

It is worth noting that training in strategy assessment and instruction should constitute an essential component of teacher preparation programs. This component can include examples of currently used strategy assessment instruments such as Oxford (1990) as well as of strategy instructional materials designed for this purpose (Chamot et al., 1999; Ellis & Sinclair, 1989; Harris, 2000, 2001; Mendelsohn, 1994; O'Malley & Chamot, 1990; Oxford, 1990; Rubin & Thompson, 1994; Weaver & Cohen, 1997).

To conclude, the present study provided relevant information about Palestinian EFL learners' use of language learning strategies and explored the relationship of learner language proficiency level and gender to strategy use. These LLS profiles can guide the planning of strategy

assessment and instruction training activities for EFL teachers based on the learner strategy needs identified in the study.

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Appendix

Strategy Inventory for Language Learning (SILL) Version 7.0 (ESL/EFL)

Source: Oxford (1990)

Directions

This form of the *Strategy Inventory for Language Learning* (SILL) is for students of English as a second or foreign language. You will find statements about learning English. Please read each statement. On the separate worksheet, write the response (1, 2, 3, 4, 5) that tells *how true of you the statement is*.

1. Never or almost never true of me
2. Usually not true of me
3. Somewhat true of me
4. Usually true of me
5. Always or almost always true of me

Part A

1. I think of relationships between what I already know and new things I learn in English.
2. I use new English words in a sentence so I can remember them.
3. I connect the sound of a new English word and an image or picture of the word to help me remember the word.
4. I remember a new English word by making a mental picture of a situation in which the word might be used.
5. I use rhymes to remember new English words.
6. I use flashcards to remember new English words.
7. I physically act out new English words.
8. I review English lessons often.
9. I remember new English words or phrases by remembering their location on the page, on the board, or on a street sign.

Part B

10. I say or write new English words several times.
11. I try to talk like native English speakers.
12. I practice the sounds of English.
13. I use the English words I know in different ways.
14. I start conversations in English.
15. I watch English language TV shows spoken in English or go to movies spoken in English.
16. I read for pleasure in English.
17. I write notes, messages, letters, or reports in English.
18. I first skim an English passage (read over the passage quickly) then go back and read carefully.
19. I look for words in my own language that are similar to new words in English.
20. I try to find patterns in English.
21. I find the meaning of an English word by dividing it into parts that I understand.
22. I try not to translate word-for-word.
23. I make summaries of information that I hear or read in English.

Part C

24. To understand unfamiliar words, I make guesses.
25. When I can't think of a word during a conversation in English, I use gestures.
26. I make up new words if I don't know the right ones in English.
27. I read English without looking up every new word.
28. I try to guess what the other person will say next in English.
29. If I can't think of an English word, I use a word or phrase that means the same thing.

Part D

30. I try to find as many ways as I can to use my English.
31. I notice my English mistakes and use that information to help me do better.
32. I pay attention when someone is speaking English.
33. I try to find out how to be a better learner of English.
34. I plan my schedule so I will have enough time to study English.
35. I look for people I can talk to in English.
36. I look for opportunities to read as much as possible in English.
37. I have clear goals for improving my English skills.
38. I think about my progress in learning English.

Part E

39. I try to relax whenever I feel afraid of using English.
40. I encourage myself to speak English even when I am afraid of making mistakes.
41. I give myself a reward or treat when I do well in English.
42. I notice if I am tense or nervous when I am studying or using English.
43. I write down my feelings in a language learning diary.
44. I talk to someone else about how I feel when I am learning English.

Part F

45. If I don't understand something in English, I ask the other person to slow down or say it again.
46. I ask English speakers to correct me when I talk.
47. I practice English with other students.
48. I ask for help from English speakers.
49. I ask questions in English.
50. I try to learn about the culture of English speakers.