

Learning Strategies and Classification in Education

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Abstract

Learning strategies are steps taken by learners to enhance their learning. An active use of language learning strategies helps learners in control of their own learning by developing language skills, increasing confidence and motivation in learning process. Strategy instructions enhance learners' independent learning and autonomous learning and help learners to take responsibility for their own learning. The more strategies a learner uses, the more the learner feels confident, motivated and self-efficacious. Teachers are encouraged to choose appropriate teaching techniques and learning strategies for students and teach them how to understand learning strategies to enhance levels of self-directed learning.

Introduction

Individual differences involving general factors will influence the rate and level of L2 achievement. But how does their influence operate? One possibility is that they affect the nature and the frequency with which individual learners use learning strategies. According to cognitive learning theories, learners are active participants in the learning and teaching process rather than passive recipients. They do not just receive information from teachers as learning process involves learners processing information which includes mental activities (Hosenfeld, 1976; O' Malley & Chamot, 1990; Oxford, 1990). The aim of using strategies is to "affect the learner's motivational or affective state, or the way in which the learner selects, acquires, organizes, or integrates new knowledge" (Weinstein & Mayer, 1986, p. 315). Oxford (1990) explained, "Strategies are especially important for language learning, because they are tools for active, self-directed involvement, which is essential for developing communicative competence." (p. 7)

Overview of Learning Strategies

Oxford (1989) defines language learning strategies as "the often-conscious steps of behaviors used by language learners to enhance the acquisition, storage, retention, recall, and use of new information" (p. 4). Cohen (1998) defines language learning strategies as:

Those processes which are consciously selected by learners and which may result in action taken to enhance the learning or use of a second or foreign language,

through the storage, retention, recall, and application of information about that language. (p. 4)

Learning strategies are the particular approaches or techniques that learners employ to try to learn an L2. Language learning strategies are conscious or potentially conscious actions and learners can identify them in their learning process (Cohen, 1998). Learning strategies consist of “mental or behavioral activity related to some specific stage in the overall process of language acquisition or language use” (Ellis, 1994, p. 529), in other words, they can be behavioral (for example, repeating new words aloud to remember them) or they can be mental (for example, using the synonyms or situational context to infer the meaning of a new word) (Ellis, 1997). Strategies can make learning “easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations” (Oxford, 1990, p. 8).

Features of Learning Strategies

A strategy is helpful if “(a) the strategy relates well to the L2 task at hand, (b) the strategy fits the particular student’s learning style preference to one degree or another, and (c) the student employs the strategy effectively and links it with other relevant strategies” (Oxford, 2003, p. 8).

Strategies are also long-range, compared with learning tactics, which are often used interchangeably with learning strategies. Learning tactics are short-term use of particular behaviors or devices while learning strategies are long-term process and learners use different strategies in their different stage of learning process (Ellis, 1997; Oxford, 1989; Oxford & Cohen, 1992). Learners employ different learning strategies when they are faced with different problems, so learning strategies are also problem-oriented which also can be found in Oxford’s studies. Oxford (1990) identified twelve key features of language learning strategies as follows:

- Contribute to the main goal, communicative competence;
- Allow learners to become more self-directed;
- Expand the role of the teachers;
- Are problem-oriented;
- Are specific actions taken by the learners;
- Involve many aspects of the learner, not just the cognitive;
- Support learning both directly and indirectly;
- Are not always observable;
- Are often conscious;
- Can be taught;
- Are flexible;
- Are influenced by a variety of factors.

Classification of Learning Strategies

Many researchers have focused on how successful or good language learners try to learn and tried to identify what strategies worked for them to find which strategies are effective for language learning (Ellis, 1997). The assumption is that once successful learning strategies were identified, they can be taught and learned by less successful learners to improve their language learning (Rubin, 1975). The methods of data collection include interviews, observations, students self-report, questionnaires and diaries. Rubin (1975) identified that good L2 learners are accurate guessers; willing to communicate and practice; are often uninhibited; monitor speech; and pay attention to meaning. Stern (1975) investigated strategies used by good language learners, and the identified strategies include:

Planning strategy: a personal learning style or positive learning strategies; Active Strategy: an active approach to the learning task; Empathic strategy: a tolerant and outgoing approach to the target language and empathy with its speakers; Formal strategy: technical know-how about how to tackle a language; Experimental strategy: a methodical but flexible approach, developing the new language into an ordered system and constantly revising it; Semantic strategy: constant searching for meaning; Practice strategy: willingness to practice; Communication strategy: willingness to use the language in real communication; Monitoring strategy: self-monitoring and critical sensitivity to language use; Internalization strategy: developing a second language as a separate reference system and learning to think in it. (p. 309)

Stern's classification provided an initial framework for further research on the language learning strategies. Compared with Rubin's study, Stern's strategies classification shares some similarities with Rubin's, such as willingness to practice and communication, attention to meaning and self-monitoring. Naiman, Frohlich, Stern, and Todesco (1978) claimed the need "to study critically the different inventories of learning strategies and techniques and to develop an exhaustive list, clearly related to a learning model" (p. 220). Researchers have identified different kinds of language learning strategies (Cohen & Chi, 2004; Naiman et al., 1978; O'Malley & Chamot, 1990; Oxford, 1990; Purpura, 1999; Rubin, 1981; Wong-Fillmore, 1979). Naiman et al. (1978) identified five major learning strategies by observing, testing and interviewing successful and unsuccessful learners in a university. The five strategies are: active task approach; realization of language as a system; realization of language as a means of communication; management of affective demands; and self-monitoring. Wong-Fillmore (1979) examined five Mexican children learning English in school and found three social strategies (i.e., join a group or seek friend's help) and five cognitive strategies (i.e., look for recurring parts in the known formulas or make the most of what you have got) used by children to increase their communicative competence. Wong-

Fillmore also argued that social strategies could increase the amount of exposure to the target language for learners so they were more important than the cognitive strategies. Rubin (1981, 1987) proposed three major strategies directly or indirectly support language learning. The first one is learning strategy including cognitive and metacognitive strategies. Rubin explained cognitive and metacognitive strategies, which can contribute directly to language learning. Cognitive strategies in learning require analysis, transformation or synthesis of learning material while metacognitive strategies refer to regulating or self-directed learning such as planning, goals setting or self-management. Rubin identified six direct learning strategies compared with indirect strategies: 1) clarification/verification strategies, including asking for verification or confirmation for the language rules; 2) guessing/ inductive reasoning, which can be used to infer meaning based on what students knew in the language; 3) deductive reasoning, which refers to learners using rules or knowledge of the language to deduce hypotheses about the language forms; 4) practice, which can be used in repetition or applying rules or focusing on the accurate use of language rules; 5) memorization, which refers to use techniques to store and retrieve new information; 6) monitoring, which include identifying and correcting errors. The second major type is communication strategies, which contribute less directly to learning and the third major type is social strategies, which are used when learners are involved in tasks and apply or practice their knowledge (Rubin, 1987).

Although there are some differences because of different participants and contexts, all these classifications of learning strategies have many similarities, but there is no consensus. Since the publication of books by O'Malley and Chamot (1990), Oxford (1990), and Wenden (1991), the research of language learning strategy began to attract the major attention in the field of second language acquisition, among which O'Malley and Chamot (1990) and Oxford (1990)'s classification are two of the best known.

O'Malley and Chamot (1990) developed three types of strategies, namely metacognitive strategies (selective attention, planning, monitoring and evaluating learning activity), cognitive strategies (rehearsal, organization, inferencing, summarizing, reducing, imagery, transfer, and elaboration), and social/affective strategies (cooperation, questioning for clarification, and self-talk).

Oxford (1990) proposed a more detailed classification model of language learning strategies based on the synthesis of the previous work on good language learning strategies and her classification is "the most comprehensive classification of learning strategies" (Ellis, 1994, p. 539). She divided language learning strategies into direct strategies and indirect strategies. Direct strategies involve direct learning and require mental processing of the language (Oxford, 1990), which include (1) memory strategies, help learners store and retrieve new information, such as grouping, creating mental linkages, applying images and sound, reviewing, and employing action, (2)

cognitive strategies, enable learners to understand and produce new language, such as reasoning, practicing, receiving and sending messages, analyzing and summarizing, (3) compensation strategies, allow learners to use the new language for comprehension or production despite limited knowledge, and they are used to make up for “an inadequate repertoire of grammar and, especially, of vocabulary” (Oxford, 1990, p. 17). The strategies include guessing meanings from context or using gestures when the learners do not know the precise expression. Indirect strategies support learning indirectly but are powerful to learning process (Oxford, 1990), which include (1) metacognitive strategies, help learners to regulate their learning, such as paying attention, planning, self-evaluating and monitoring one’s errors or the learning process, (2) affective strategies, help learners to deal with their own emotions, motivation, and attitudes, such as lowering anxiety, self-rewards, self-encouragement, (3) social strategies, refers to ways in which learners learn the language through interactions with native speakers or the target language, such as asking questions, cooperating with peers and improving cultural understanding.

Oxford also developed the Strategy Inventory for Language Learning (SILL), which has two versions, one for English speakers learning a new language (version 5.0) and the other for speakers of other language learning English (version 7.0). In other words, one can be used for ESL students and the other can be used for English as a foreign language (EFL) students. But she did not distinguish the differences between the ESL and EFL students. To examine language learners’ strategy use many researchers still use SILL to collect data (Chamot, Barnhardt, El-Dinary, & Robbins, 1996; Griffiths, 2003; Yang, 1996).

Based on the previous research on successful language learners, Ellis (1994) summarized five major aspects of good or successful learners including: “a concern for language form; a concern for communication; an active task approach; an awareness of the learning process; and a capacity to use strategies flexibly in accordance with task requirements” (p. 546). Wenden (1991) proposed two main kind of learning strategies: cognitive strategies (select information, comprehend, store and retrieve information) and self-management strategies (monitor or manage learning process such as regulatory skills or self-directed learning skills). Another commonly used language learning strategy inventory designed by Cohen and Chi (2004) is the Learning Strategy Use Inventory. The inventory is divided into listening, vocabulary, speaking, reading, writing, and translation sections to measure strategy use. Table 1 represents the major classifications of language learning strategies.

Table 1
Classification of Language Learning Strategies

Researcher	Classification					
Stern (1975)	Planning Strategy	Active Strategy	Empathic Strategy	Formal Strategy	Experimental Strategy	
	Semantic Strategy	Practice Strategy	Communication Strategy	Internalization Strategy		
Naiman et al (1978)	Active task approach	Realization of language as a system	Realization of language as a means of communication	Management of affective demands	Self-monitoring	
Rubin (1987)	Direct Strategies			Indirect Strategies		
	Learning Strategies		Communication Strategies		Social Strategies	
	Cognitive Strategies	Metacognitive Strategies				
O'Malley & Chamot (1990)	Cognitive Strategies		Metacognitive Strategies		Social/Affective Strategies	
Oxford (1990)	Direct Strategies			Indirect Strategies		
	Memory	Cognitive	Compensation	Metacognitive	Affective	Social
Wenden (1991)	Cognitive Strategies		Self-Management Strategies			

Factors that Influence Learning Strategy Use

Language learners can use memory, metacognitive, affective, cognitive, social, and compensation strategies to enhance their language learning. The successful learners are more likely to use strategies according to specific tasks, context, or different needs. The more effective learners used strategies more “appropriately, with greater variety, and in ways that helped them complete the task successfully” (Chamot & Kupper, 1989, p. 17). Successful language learners are more flexible and appropriate in their use of learning strategies (Ellis, 1997). Different strategies have been reported associated with different learning styles (Oxford & Cohen, 1992). Various factors have been found to influence learners’ choice of language learning strategies. Ellis (2008) claimed that factors influencing learners’ choice of learning strategies include learner factors and social and situational factors. Chamot and Kupper (1989), Oxford (1994), Oxford and Ehrman (1995), Oxford, Nyikos, and Ehrman (1988) identified factors that influenced the choice of language learning strategies including age, gender, learning style, cultural background, type of task, motivation, attitudes, and teacher perceptions. Motivated

learners are more likely to use more strategies than less motivated learners and the reasons for studying the language also contribute to the choice of learning strategies. Learners with negative attitudes or beliefs often use less effective strategies (Oxford, 1994; Oxford & Nyikos, 1993).

Politzer (1983) found that Hispanics and Asians had differences in the choice of language learning strategy use. Hispanics used more social strategies while Asians used more memorization strategies. Politzer and McGroarty (1985) also claimed that the perceptions of good strategies are ethnocentrically-based and similar findings also found that Asian students preferred strategies such as rote memorization and language rules instead of communicative strategies (Tyacke & Mendelsohn, 1986). Bedell and Oxford (1996) explored strategy use of students from different cultural backgrounds. It was found that students with Hispanic background had high scores in metacognitive strategies while Asian students used more social, metacognitive, cognitive and compensation strategies and higher proficient students used more strategies overall than less proficient students.

According to Oxford, Nyikos and Ehrman (1988), females use more social strategies than males. Dreyer and Oxford (1996) had a similar finding that female students used more metacognitive strategies than male students in their study. Huang and Van Naerssen (1987) claimed that high proficient learners used more functional strategies to enhance communicative skills. O' Malley, Chamot, Stewner-Mazanares, Russo and Kupper (1985) interviewed and observed 70 high school students who learned English in classrooms. It was found that beginning and intermediate level students used more cognitive strategies than metacognitive strategies, but intermediate level students still used more metacognitive strategies than beginning level students, which indicated strategy use may be associated with proficiency level. Both levels of students preferred note-taking, repetition, cooperation, and asking for clarification. Older or more advanced learners used more complex strategies and certain strategies were identified often by advanced learners (Ehrman & Oxford, 1989). Chamot and El-Dinary's (1999) noted that high-achieving children used greater metacognitive strategies while low-achieving children used greater cognitive strategies. Ellis (1997) also argued that good language learners are especially good at metacognitive strategies. Abraham and Vann (1987) found that very successful learners used a greater variety of learning strategies and they preferred guessing the meaning, paraphrasing and using more clarification strategies. It reinforced Phillips' (1991) study, which explored 141 Asian adult ESL learners strategy use in the U.S. It also found that more proficient students used more paraphrasing, setting goals or avoiding verbatim translation. Advanced-level students used strategies more frequently than elementary-level students (Griffiths, 2003). High achievement group students reported significantly more different strategies than low achievement group. Less successful students were more likely to use same strategies available to them (Pape & Wang, 2003). In conclusion, successful learners used

strategies more frequently, flexibly and with greater variety. They are more effective at monitoring and adapting their strategies and they can use inference or background information to learn the language. However less effective learners tend to overuse one or two major ineffective strategies (Chamot & El-Dinary, 1999). Dörnyei (1994) discussed strategies that motivate learners as follows:

...develop students' self-confidence through regular praise, encouragement, and reinforcement, making sure that students regularly experience success and a sense of achievement... and involving students in more favorable and easier activities; promote students' self-efficacy with regard to achieving learning goals by teaching students learning and communication strategies, as well as strategies for information processing and problem-solving; promote favorable self-perceptions of competence in L2 (second language) by highlighting what students can do in the L2 rather than what they cannot do, encouraging the view that mistakes are part of learning; decrease student anxiety by creating a supportive and accepting learning environment in the L2 classroom... and applying anxiety-reducing activities and techniques; promote motivation-enhancing attributions by helping students recognize links between effort and outcome and attribute past failures to ...the use of inappropriate strategies rather than to lack of ability; and, encourage students to set attainable sub-goals. (p. 281)

According to Dörnyei strategies are not the end for language instruction, but are suggestions for enhancing learner's motivation and confidence. Dörnyei emphasized the significance of regular praise, positive reinforcement and supportive environment in strategy instruction. It is also indicated that language learning strategies can be trained and taught, which is also suggested by many researchers (Cohen, 1998; Dörnyei & Skehan, 2003).

Learner training should facilitate learners having access to methodological resources such as techniques and activities, and using a criterion for selection of materials (Gremmo & Riley, 1995). Cheng (2000) claimed that "any teacher, Western or Eastern, who plans to use methodologies which inevitably involve students' participation must make sure that the students are familiar with and accept such methodologies" (p. 444). Teachers and researchers have recognized the importance of training learners in effective strategy use to promote learner autonomy (Wenden, 1991). Teachers are encouraged to choose learning strategies suitable for students and teach them how to understand learning strategies (Reder & Strawn, 2001). Murray (2004) also maintained that teachers needed to use the most appropriate methods, procedures, and activities to promote learner autonomy by "modeling for students strategies which they can use in self-directed learning" (p. 6).

Conclusions

Appropriate language learning strategies result in greater motivation and confidence. Strategy instructions can enhance learners' self-efficacy and autonomous learning and help learners to take responsibility for their own learning. Teachers need to provide learners access to methodological resources and appropriate learning strategies, modeling strategies, and guidance to help learners make progress and achieve academic success.

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