Sétif 2 University

LA/ Master 2

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Lecture 14: Neuropsychology of SLA: Strategy Instruction

Neuropsychological Aspect of Language Learning

It could be argued that the OCST (Oral Communication Strategy Training) appears to have a positive impact on students' declarative knowledge 'about' strategy use. The OCST has yet to have a strong effect on the speakers' procedural knowledge of 'how to' implement strategy use (Lam, 2006). It is through repeated practice that declarative knowledge of strategy use may be automatized to become observable, procedural knowledge of strategy use. This argument is in line with Johnson's process of "proceduralising declarative knowledge" through practice (Johnhson, 1994, p. 125). Hence, while the training effect may be observable, the value of strategy training may lie in its helping students acquire declarative knowledge, which is the first step to proceduralisation on the learning continuum (Lam, 2006).

Need to Introduce Meta-Cognitive Training to Raise LLs' Awareness of CSs

It is necessary to introduce explicit meta-cognitive strategy training to raise awareness of CS strategy use in order to further expand TL development. Establishing CS training with a focus on solving TL vocabulary problems could be useful for the future curriculum development. In fact, designing books with explicit strategy training in order to raise the consciousness of the LLs to CSs is a good starting point (Nakatani et al., 2012). Researchers (Tarone & Yule, 1989; Oxford, 1990; O'Malley & Chamot, 1990) supported the idea of teaching CSs to help develop EFL students' communication skills either by raising LLs' consciousness or training them. Therefore, learning CSs is undeniably useful for EFL LLs. According to Nakatani (2005), more training in strategy use and awareness raising on the use of CSs are needed among EFL LLs, and by extention of different proficiency levels.

The discrepancy between self-awareness of what the learner might potentially use and what they may actually employ in their real communication can be attributed to the lack of awareness of what the strategies are and how they should be employed. This is a call for more systematic training in communicative strategies awareness among students of different proficiency levels (Hua et al., 2012). It is suggested that L2 teachers explicitly introduce OCSs to less fluent LLs and encourage them to consciously use a greater variety of OCSs to promote their ability to cope with difficulties during listening and speaking (Mirzaei & Heidari, 2012). In this regard, Faerch & Kasper (1983, p. 56) stated that "by learning how to use communication strategies appropriately, learners will be more able to bridge the gap between pedagogic and non-pedagogic communication situations".

Related literature has validated the beneficial effects of teaching and enhancing the awareness of OCSs (Brown, 2000; Dörnyei, 1995; Huang & van Naerssen, 1987; Maleki, 2007; Nakatani, 2005). Furthermore, L2 LLs can raise their awareness of efficient strategies by examining their performance, and thereby improving their target proficiency (Nakatani, 2005). Students need for guidance on how to make use of their limited linguistic knowledge adopting appropriate CSs. Therefore oral expression teachers should raise LLs' awareness of the communicative potential of some CSs in different communication tasks (Ghout-Khenoune, 2012).

Strategies in the Language Classroom and Strategy Training

The notion of 'learner autonomy' is a direct consequence of the preoccupation with learner-centredness in educational policies and practices (Manchón, 2000). Following Johnson and Johnson (1998), learner autonomy "is one of a number of closely related concepts within the general paradigms of leaner-centred education. It underpins the individualization of instruction, the development of patterns of self-directed learning and of methodology of self-access, as well as implying some degree of learner training" (pp. 306-7). By learner training is understood a type of instructional intervention whose basic aim is to help LLs become better language LLs/ users. As such, learner training involves developing the student's awareness of him/herself as a learner, of the process of language learning and use, and of the nature of the target language.

It also involves instructing LLs in the use of language learning and language use strategies. 'Strategy training' or 'strategy instruction' is succintly summarized by Cohen (1998) as follows, "The strategy training movement is predicated on the assumption that if learners are conscious about and become responsible for the selection, use, and evaluation of their learning strategies, they will become more successful language learners by…talking more responsability for their own language learning, and enhancing their use of the target language out of class. In other words, the ultimate goal of strategy training is to empower students by allowing them to take control of the language process" (p. 70). As posited by Chamot & O'Malley (1994, pp. 387-8), the goal of instructing language LLs in the use of strategies is "to develop self-regulated learners who can approach new learning tasks with confidence and select the most appropriate strategies for completing the task". This means that the focus of strategy training is on 'how' to learn rather than on 'what' to learn (Manchón, 2000).

In its application to L2 situation, Manchón (1998) interpreted the what-to-learn goals as the double task faced by the L2 learner: to come up with knowledge of the L2 and to develop the ability to put acquired knowledge to use when attempting to produce or interpret messages in the L2. Manchón (1998) posited that three micro-processes are involved in establishment of L2 knowledge: integration of new knowledge into existing knowledge structures, discovering any mismatch between L2 and interlanguage rules, and automatization of L2 knowledge so that it is available and efficient retrieval and use.

Together with these what-to-learn goals, the language learning/ teaching situation also encompasses corresponding how-to-learn goals. These relate to the acquisition of the relevant knowledge to achieve the what-to-learn goals. The notion of 'strategies' is a cover term for this special type of knowledge that L2 LLs must acquire (Manchón, 1998). It is customary to distinguish two macro groups of strategies. 'Learning strategies' are related to the first component of what-to-learn goals, i.e., the expansion of L2 knowledge and the increasing of its accessibility. In contrast, the implementation of 'language-use strategies' is aimed at the acquisition of the ability to put acquired knowledge to use, this being the second dimension of what-to-learn goals (ibid). To this

it should be added that when putting acquired knowledge to use, L2 LLs also learn how to make full and efficient use of their available knowledge resources, while at the same time L2 users must become skillfull at solving problems caused by lack of knowledge or how accessibility to such knowledge which is precisely the situation that triggers the use of CS (Manchón, 1998).

Strategy instruction is justified on the grounds that language teaching must help learners learn how to learn, an educational aim which is in turn based on the partially tested assumption that the L2 learner's how-to-learn procedures are amenable to modification and change through instruction. It is further postulated that an off-shot of strategy instruction would be the development of the learner's autonomy. Three out of the five features that according to Dickinson (1992, 1993) characterized autonomous learners are related to strategy use. Dickinson contended that autonomous learners : (i) can identify what has been taught; (ii) are able to set their own learning objectives; (iii) select and implement appropriate strategies; (iv) monitor the uses of strategies by themselves; and (v) can take decisions as to continue or give up the use of strategies depending on whether or not they are working for them. In short, autonomous learners have developed knowledge about strategies and control over their use. Strategy instruction must, therefore, include those two components of knowledge (both declarative and procedural) of strategies and control of their use (ibid). According to Iwai and Gobel (2003), the terms 'instruction' and 'training' are both used and have separate connotations. The former represents the meaning of teaching for certain objectives, while the latter stands for teaching in a specific program.

Rationale for Strategy Instruction

According to McDonough (1999), the aim of strategy intervention is to bridge the gap between "what learners can do and what they will do" (p. 4). The inclusion of strategy training in instructed second and foreign language learning has rested on two main assumptions, one related to general educational matters, and another one related to L2 learning and use. From the first perspective, schools must empower people with the tools and means to become independent and successful life-long learners (Weinstein, Husman, & Dierking, 2000). This dimension of learning/ teaching processes is referred

to as 'learning to learn', a construct that in its application to instructed language learning would be equated with learning to become a successful language learner/ user who has the ownership of his/ her own lering and can work independently of the teacher, "It is commonly accepted that schools must prepare autonomous, responsible citizens. In the millenium with its rapidly changing social and economic conditions, the traditional aim of education, transmission of knowledge is not enough. Schools are no longer able to predict and then equip learners with the skills they will need throughout the rest of their professional lives. What they need to do is favour the most important of skills, learning how to learn" (Harris et al., p. 18).

The same conception underlies Cohen's words (1998,p. 70), "The strategy training movement is predicated on the assumption that if learners are conscious about and become responsible for the selection, use, and evaluation of their learning strategies, they will become more successful language learners by… taking more responsibility for their own language learning, and enhancing their use of the target languages out of class. In other words, the ultimate goal of strategy training is to empower students by allowing them to take control of the language learning process". The second assumption on which the strategy instruction movement rests is the belief that there is a (causal) relationship between strategy use and L2 development. McIntyre & Noels (1996) stated that, "there appears to be little doubt that the use of learning strategies tends to facilitate language learning" (p. 374). This position is also shared by Hsiao & Oxford (2002), "strategies are the L2 learner's tool kit for active, conscious, purposeful, and attentive learning and they pave the way toward greater proficiency, learner autonomy and self-regulation" (p. 372). Along the same lines, Cohen (2003) posited that, "if learners have a well-functioning repertoire, then these strategies will facilitate the langauge learning process bt promoting successful and efficient completion of language learning tasks, as well as by allowing the learners to develop their own individualized approaches to learning" (p. 280).

In short, there seems to be a consensus among strategy researchers that strategy use is closely linked to success in language learning and that, accordingly, strategy instruction should be part of instructed language learning. The explicit teaching of strategies proved

to be beneficial to language learners in terms of (i) widening their strategic repertoire; (ii) improving test scores; (iii) increasing their self-confidence and motivation; (iv) developing their autonomy; and (v) taking more responsibility for their own learning. The author concludes that these findings "seem to fit into the increasingly promising picture of the effectiveness of strategy instruction" (Rees-Miller, 1993, p. 116). Training of language learning strategies is called many things: 'strategy training', 'learner training', 'learning-to-learn training', 'learner methodology training', and 'methodological initiation lor learners' (Oxford, 1990). In addition to teaching language learning strategies, it also deals with feefings and beliefs about taking on more responsability. Stategy training can cover more general aspects of language learning, such as the kinds of language functions used inside and outside the classroom, significance of group work and individual efforts in language learning, trade-offs between accuracy and fluency, fear of mistakes, learning vs. acquisition, and ways in which language learning differs from learning other subjects (ibid).

Types of Strategy Training

Language learners can be taught in at least three different ways: awareness-training, one-time strategy training, and long-term strategy training. (1) awareness-raising: it is also known as consciousness-raising or familiarization training. In this situation, participants become aware of and familiar with the general idea of language learning strategies and the way such strategies can help them accomplish language tasks; (2) one-time strategy training: it involves learning and practicing one or more strategies with actual language tasks, usually those found in the regular language learning program. This kind of training gives the learner information on the value of the strategy, when it can be used, how to use it, and how to evaluate the success of the strategy. It is appropriate for learners who have a need for particular, identifiable, and very targeted strategies that can be taught in one or just a few session(s); (3) long-term strategy training: like the previous type, it involves learning and practicing strategies with actual language tasks. Again, students learn the significance of particular strategies, when and how to use them, and how to monitor and evaluate their own performance. Also, it should be tied to the tasks and objectives of the language program. However, it is more

prolonged and covers a greater number of strategies. It is likely to be more effective than one-time training (Oxford, 1990).

A Model for Strategy Training

It is suggested that strategy instruction must include different stages. First, the stategy training programme should start with an assessment of the strategies that learners currently use and how well they use them because as Wenden (1991, p. 108) stated, "the intervention should match the need". The next stage involves either deductive or inductive awareness of the strategy/ ies learners are going to be trained in. The main objective here is to raise the student's awareness of the value and benefits of strategy use. To this end, the instructor helps the learner develop declarative knowledge about (what strategy/ ies they are learning to implement), procedural knowledge (how the strategy/ ies should be used and why) and conditional knowledge (in which contexts should the strategy/ ise be used) (Manchón, 2000). This explicit strategy instruction is predicated on the grounds that the metacognitive awareness that learners gain will help the retention and transferability of strategy use. The third stage is the practice, where learners are given practice in using the strategy in question in contextualized tasks. The final stage includes the evaluation of strategy use and the demonstration of how the strategy can be transferred to other contexts and tasks (ibid).

Oxford (1990) proposed a model for ST of eight-steps. The model focuses on the teaching of LSs themselves, rather than on the broader aspects of language learning. The steps might not always have to be done in this order, some can be performed at the same time, or in a slightly different order. The first five are planning and preparation steps, while the last three involve conducting, evaluating, and revising the training (**Table 3**).

Table3: Steps in the Strategy Training Model (Oxford, 1990)

Step's Number	Steps' Identification
1.	Determine the learners' needs and the time available.
2.	Select strategies well.
3.	Consider integration of strategy training.

4.	Consider motivational issues.
5.	Prepare materials and activities.
6.	Conduct 'completely informed training'.
7.	Evaluate the strategy training.
8.	Revise the strategy training.

In Step1, you should determine the LLs' needs and the time available. The initial step is to consider the needs of the LLs and determine the amount of time you have for the activity. You have to consider who the LLs are and what they need (children, adolescents, college students, graduate students, adults in continuing education, refugees or immigrants, advanced language LLs/ intermediates/ beginners), their verbal abilities, their strengths, weaknesses, the used LSs, the strategies to be learned, etc (Oxford, 1990). In Step 2, you select strategies well: (a) select strategies which are related to the needs and characteristics of your LLs (cultural and other types of biases should be taken into consideration; (b) choose more than one kind of strategy to teach (by deciding the kinds of compatible, mutually supporting strategies that are important for your students); (c) choose strategies that are generally useful for most LLs and transferable to a variety of langauge situations and tasks; (d) choose some strategies that are very easy to learn, and some strategies that are very valuable but might require a bit more effort. In other words, do not include all easy strategies or all difficult strategies (ibid). And in the third step, you should consider integration of ST. Attempts to provide relatively detached, content-independent strategy training have been at best only moderately successful. LLs sometimes rebel against ST that is not sufficiently linked with their own language training. When ST is closely integrated with language learning, LLs better understand how the strategies can be used in a significant, meaningful context (ibid).

In Step 4, you consider motivational issues: decide whether to give grades or partial course credit for attainment of new strategies, or whether to assume that LLs will be motivated to learn strategies purely in order to become more effective LLs. A different type of motivational issue relates to pre-existing cultural (or other) preferences for

certain types of strategies. Being sensitive to this issue does not mean, however, that you should avoid introducing new strategies. It means that you might need to phase in very new strategies gently and gradually, without whisking away students' 'security blankets' no matter how dysfunctional you might consider those old strategies to be (ibid). And in the fifth step, you should prepare materials and activities. The materials you are using for language instruction will double well for strategy training materials. In addition to some handouts, a book for LLs to use at home and in class (especially if you are planning long-term ST). Get LLs to develop a strategy handbook themselves (Oxford, 1990).

In Step 6, you conduct 'completely informed training': make a special point to inform LLS about why the strategies are important and how they can be used in new situations. Provide practice with strategies in several language tasks. Give learners the explicit opportunity to evaluate the success of their new strategies. Research shows that ST which fully informs the learner (by indicating why the strategy is useful, how it can be transferred to different tasks, and how LLs can evaluate the success of the strategy) is more successful than training that does not (ibid). In the seventh step, you evaluate the strategy training. LLs' own comments about their strategy use are part of the training itself. Possible criteria for evaluating training are task improvement, general skill improvement, maintenance of the new strategy over time, transfer of strategy to other relevant tasks, and improvement in learner attitudes (Oxford, 1990). And in step 8, you should revise the ST. The evaluation (Step 7) will suggest possible revisions for your materials. This leads right back to Step 1, a reconsideration of the characteristics and needs of the learners in light of the cycle of ST (ibid).

In addition to the eight-steps procedure proposed by Oxford (1990), Dörnyei (1995) proposed a broader interpretation of teaching that would involve the following six (interrelated) procedures, all relevant to strategy training. The first is 'raising learner awareness about the nature and communicative potential of CSs' by making LLs conscious of strategies already in their repertoire, sensitizing them to the appropriate situations where these could be useful, and making them realize that these strategies would actually work. The importance of conscious attention in the learner's

internalization process is highlighted by Schmidt (1990). From a cognitive perspective, the main role of instruction is to orient the learners and focus their attention on a given topic. Faerch & Kasper (1986) also emphasized the need to increase the learners' 'metacommunicative awareness' (p. 187) with respect to strategy use. In fact, most definitions of CSs include (potential) consciousness as a major feature, as they also point out, this implies that these strategies "can be influenced by teaching" (Faerch & Kasper, 1984, p. 47).

The second is 'encouraging students to be willing to take risks and use CSs', that is, to manipulate available langauge without being afraid of making errors (Faerch & Kasper, 1986; Yule & Tarone, 1990). Willems (1987) also argued that very often we need to make it clear to learners that for some strategies, "their innate tendency to use them in free speech activities is quite a natural urge and nothing to be frowned upon" (p. 356). The third is 'providing L2 models of the use of certain CSs' through demonstrations, listening materials and videos, and getting learners to identify, categorize, and evaluate strategies used by native speakers or other L2 speakers. Or after viewing their own recordings, students analyze their own strategy use (Faerch & Kasper, 1986). The fourth is 'highlighting cross-cultural differences in CSs use' might involve degrees of stylistic appropriateness associated with CSs (e.g., in some languages particular CSs may be seen as indications of bad style), differences in the frequency of certain CSs in the speaker's L1 and L2, as well as differences in the verbalization of particular CSs.

The fifth is 'teaching CSs directly' by presenting linguistic devices to verbalize CSs which have a finite range of surface realizations. According to McLaughlin (1990), verbal tasks are hierarchically structured and in order to realize a higher order goal, each of the component skills needs to be executed. This would imply that being familiar with a strategy in L1 might be an insufficient condition for efficient strategy use in L2 if certain lower order components are missing or not automatized properly. Tarone & Yule (1989) pointed out that 'circumlocution', for example, requires certain basic core vocabulary and sentence structures to describe properties (e.g., shape, size, colour, texture) and function. They provide examples like 'top side, bowl-shaped, triangular, on

the rim, circular, sequare). Dörnyei & Thurrell (1992) considered the automatization of basic structures such as 'it's a kind of; sort of the thing you use for…; it's what/ when you…; it's something you deo/ say when…; necessary for 'circumlocution'.

They also provide a list a list of common fillers and hesitation devices which come in handy when learners wish consciously to buy time (e.g., well, actually, as a matter of fact, the thing is… how shall I put it), as well as a set of ways to appeal for help (e.g., what do you call it/ someone who…what's the word for…). The sixth step is 'providing opportunities for practice in strategy use' appears to be necessary because CSs can only fulfil their function as immediate first aid devices if their use has reached an automatic stage (Dörnyei, 1995). The latter also propose that this automatization will not always occur without specific focused practice. Kellerman (1991) acknowledged the possible usefulness of situational classroom practice of strategies in order to help learners overcome inhibitations arising from having to operate in the L2.

Identification of Strategy Types for Training

In studies of human learning in general, several broad strategy types for enhancing learning effectiveness have been identified: primary strategies for text processing; support strategies for assisting the primary strategies (Dansereau, 1985; Dansereau, Brooks, Holley & Colins, 1983); strategies for specific learning skills, and strategies for developing an efficient executive controller of learning (Derry & Murphy, 1986). Results of ST have been positive in general. For example, in Dansereau's (1985) comprehension/ retention experiment, the experimental group revealed significantly greater positive precourse/ postcourse changes than did the control group on short-answer and multi-choice test measures.

One of the major problems is that there has been little consensus as to which types of strategies are more conductive to learning and should therefore be selected for training (Ellis, 1997). There are at least three major taxonomies. First, a tripartite system including cognitive, metacognitive and social/affective strategies (Chamot, 1993; O'Malley & Chamot, 1990; Wenden & Rubin, 1987); second, a diachotomy of direct and indirect strategies (Oxford, 1990); and third, a distinction between language learning

strategies and language use strategies (Cohen, 1998). Based on their own categorization schemes, researchers made decisions on the types of strategies they believed were useful to language learning and hence worth teaching (Lam, 2004).