

Empowering Students With Language Learning Strategies: A Critical Review of Current Issues

Susana V. Rivera-Mills
Oregon State University

Luke Plonsky
Michigan State University

Abstract: *This article analyzes the body of research literature that has brought us to the state of our current knowledge regarding learning strategies in general and learning strategies instruction as they relate to second language acquisition (SLA). Three categories are discussed: (1) types of learning strategies, (2) learning autonomy and strategy training, and (3) other strategy-related factors such as metalinguistic development and internal/external variables related to the use of learning strategies (e.g., motivation). By conducting a critical review of the issues presented in the literature, the analysis arrives at the implications for language teaching and language learning, taking into consideration the perspective of both the instructor and the student.*

Key words: *language teaching, learning strategies, second language learning*

Language: *Relevant to all languages*

Introduction

In the last few decades we have seen numerous studies investigating the use of strategies by second language (L2) learners. Several researchers have defined these studies as the thoughts and actions of learners who are attempting to increase their learning, comprehension, and retention (Brown, 2000; O'Malley & Chamot, 1990; Oxford, 1990; Scarcella & Oxford, 1992; Yamamorio, Isoda, Hiromori, & Oxford, 2003). Initial interest in students' use of learning strategies existed in the mid-1970s and early 1980s and produced questions such as, Why don't learners learn what teachers teach? (Allwright, 1984). Questions like this spawned exploration into how students' skills and knowledge are acquired differently (Nunan, 1995). More specifically, research into these individual differences has looked beyond instruction and other learner external factors to study both the processes that take place within the learners themselves and how their productivity can be improved (Luján-Ortega & Clark-Carter, 2000; Wenden & Rubin, 1987).

Susana V. Rivera-Mills (PhD, University of New Mexico) is Associate Professor of Spanish Linguistics at Oregon State University in Corvallis, Oregon.

Luke Plonsky (MA, Northern Arizona University) is a PhD student in Second Language Studies at Michigan State University in East Lansing, Michigan.

To this end, this article reviews the body of research that has led us to the current status of learning strategies and learning strategies instruction. This extensive research can be organized into three general categories: types of learning strategies, learner autonomy and strategies training, and other strategy-related factors including students' metalinguistic awareness and variables related to the use of learning strategies (e.g., motivation, gender). Based on a critical review of these categories, as presented in recent literature, this investigation will consider the implications that such issues have for language teaching and learning through the consideration of both the instructor's and the learner's perspectives.

Types of Learning Strategies

In order to understand how learning strategies can influence language learning, we must begin by identifying the various types of learning strategies. Although many distinctions have been made between different types of learning strategies, it should be noted that, to date, there is no consensus as to which strategies should be included in the SLA research literature and under which categories to include them. The studies presented in this section provide categories that summarize the most common types of learning strategies. These studies attempt to guide instructors by informing them of the most effective learning strategies for their students and how to utilize them.

For example, Purpura's (1997) and Gan, Humphreys, and Hamp-Lyon's (2004) classification systems include cognitive strategies, i.e., those that require direct control over the material, and metacognitive strategies, which involve planning or thinking about production or comprehension. Following their work on 70 beginner and intermediate high school students' strategy usage, O'Malley, Chamot, Stewner-Manzanares, Kupper, and Russo (1985) added to the previous categories a new grouping referred to as socioaffective strategies—those strategies that take into consid-

eration issues such as classroom interactions and the learning environment.

Weaver and Cohen (1998) and others (e.g., Bialystok, 1990; Brown, 2000) provide an alternate distinction, choosing among strategies used principally for learning the L2 and those whose purpose is to enhance or improve L2 usage. In addition, several scholars (e.g., Dörnyei, 1995; Macaro, 2001) have recognized what they identify as communication strategies. According to Macaro, these are productive classroom tools in that they provide learners with the assurance that they are able to communicate despite their lack of perceived ability and knowledge. Finally, Oxford's (1990) work lays out the most exhaustive hierarchy of learning strategies to date. She first differentiates between direct and indirect strategies, which she then sorts into six separate sets. Under the direct strategies she lists memory (e.g., creating mental linkages), cognitive (e.g., analyzing), and compensation strategies (e.g., guessing). Under indirect strategies, she classifies metacognitive (e.g., evaluating one's learning), affective (e.g., encouraging one's self), and social strategies (e.g., asking questions). All of these categories attempt to identify what successful learners do so that these strategies can be taught to less successful learners.

Learner Autonomy and Strategies Training

As we seek a better understanding of the complex interplay of variables such as learning strategies and styles that promote L2 acquisition (Green & Oxford, 1995; Luján-Ortega & Clark-Carter, 2000), we turn to studies that focus on learner internal factors (e.g., learner autonomy) and how these influence overall student achievement. Learner autonomy, defined as the self-regulatory practices that a student undertakes in his or her own learning (Oxford, 1999), is one characteristic in L2 students that has been found to correlate positively with successful L2 acquisition. A strong relationship also has been shown between learner

autonomy and the use of learning strategies because they both promote the self-directed nature of learning (Macaro, 2001; Oxford, 1990; Wenden, 1985, 1992). Furthermore, an additional indication of the connection between autonomy and learning strategies is found in the field of educational psychology, which has shifted away from the term learning strategy and has opted instead for self-regulatory learning (Dörnyei, 2003).

Learner autonomy and learning strategies, especially when used by informed students, place students at the center of the L2 classroom (Weaver & Cohen, 1998), enabling them to make pedagogically sound decisions concerning their own learning (Nunan, 1995). The question, then, is how to enhance student autonomy through the use of learning strategies. The use of such a paradigm may require considering new roles for instructors and students and may challenge students' beliefs about language learning (Gan et al., 2004; Nation, 2001; Oxford, 1990).

With the broad objective of increasing students' autonomy, learning potential, and overall success, many instructors and researchers have attempted to teach L2 students strategies believed to be beneficial. This practice has been identified by several different names such as strategies training, learner training, and learning-to-learn training. Yet the goal always remains the same: to facilitate L2 acquisition by raising students' awareness of the language learning tools at their disposal, and to provide them with instruction on how to use these tools most appropriately (Cohen, 1998; McDonough, 2002; Oxford, 1990). More specifically, the benefits of learning strategies training include, in addition to greater learner autonomy, connecting *what* students know and *how* they come to know what they know. Guiding students in this way provides them with a heightened sensitivity toward the process of acquiring a second language (Weaver & Cohen, 1998).

Before highlighting two of the studies that either provide support for or argue against strategies training, consider the

following general suggestions for how and why to carry out strategies training. The basic premise behind strategies training is simple: A trained learner will be better at learning than an untrained one. First and foremost, any training should serve the objectives of the students and/or curriculum (Chamot, 1988; Oxford, 1990). Second, one potential obstacle to strategies training is the set of beliefs that the students themselves bring to the language classroom. In order to account for this, training programs are better off taking a practical approach—one that convinces students of the value of learning strategies. Students are to be provided with evidence for the positive effect of learning strategies in a way that avoids abstract, theoretical explanations and discussion (Nation, 2001; Wenden & Rubin, 1987). Third, there is some debate as to whether or not instructors should train students how to approach a new task that has been delegated to them (Weaver & Cohen, 1998). The argument behind having the instructors conduct the training is that they, more than an unfamiliar individual coming into the classroom, have the students' trust and can more effectively influence their beliefs and practices concerning language strategies, learning, and use (Oxford, 2001a). Fourth, it is crucial for the instructor–student dialogue to remain open throughout strategies training in order to bridge the gap between differing perspectives.

Many researchers have noted a mismatch between the procedures that L2 students and their instructors see as effective (Green, 1993; Hedgcock & Lefkowitz, 1994; McCargar, 1993; Miley & Gonsalves, 2003; Noels, 2001; Peacock, 2001; Plonsky & Mills, 2006; Schulz, 2001). The disparity between the two groups may have a negative affective impact by causing tension, demotivation, frustration, and other learning conditions that are counterproductive to directed L2 acquisition (Garrett & Shortall, 2002; Green, 1993; McCargar, 1993; Morris & Tarone, 2003; Noels, 2001; Noels, Clément, & Pelletier, 1999; Oxford,

2001b; Peacock, 2001; Reid, 1987; Schulz, 2001; Terrell, 1977; Tse, 2000).

However, as Peacock (2001) points out, the opposite is also true. A match between students' and instructors' beliefs as to what constitutes efficacy in language instruction results in harder work and greater gains in students' L2 learning. In order to avoid negative outcomes from strategies training, it is essential that the student not only understand the learning strategies but also perceive them to be effective and able to be implemented (MacIntyre & Noels, 1996). To that end, the students must be informed not only of the strategies themselves but also how they will help them better learn the L2.

Although there is no consensus on the effectiveness of learning strategies training, numerous empirical studies support it (Nunan, 1997). Some even go so far as to argue for an inherent value of strategies training, regardless of the training methodology and techniques used (Allen, 2003). Yet others (e.g., Rees-Miller, 1993) are staunchly opposed to learner training. In support of learner training, Brown and Perry (1991) investigated the relative effectiveness of three strategies for learning English as a second language (ESL) vocabulary: the key word method, a semantic processing method, and a combined key word-semantic strategy. Each strategy was taught to two classes of first language (L1) speakers of Arabic. The results showed support for the teaching of all three learning strategies, particularly the combined approach. Other studies have yielded less linear yet equally promising results. For example, although no direct evidence for language gains was found, Nunan's (1997) study trained students using 15 different learning strategies and found higher levels in the experimental group's motivation, knowledge of strategies, and perceived usefulness of strategies. Nunan concludes by drawing a parallel between the effect of instruction on learning strategies and the effect of instruction on L2 acquisition (see Long, 1983; Norris & Ortega, 2000).

While both instruction and opportunities for practice (i.e., output) are needed for acquisition to occur, he claims that strategies instruction and opportunities to apply the strategies are needed for both instruction and application to be successful. What remains unclear from his study, however, is whether one should expect the relationship between strategy awareness and gains in student motivation to be of a causal or simply correlated nature.

Other Strategy-Related Factors

Considering these and other studies, the state of research on learner training is wide open. As a field, we have yet to pin down the specific means by which L2 students can be taught the strategies that infallibly improve their communicative competence (Brown, 2000; McDonough, 2002). In an attempt to better understand this relationship between learning strategies and higher levels of L2 competence, we now turn to an exploration of several specific factors related to the use of learning strategies. We will discuss both learner external factors (i.e., the techniques by which learning strategies can most effectively be taught to L2 students) and the complex system of learner internal factors (e.g., motivation, gender, proficiency) that are related to learning strategies use.

Development of Students' Metalinguistic Awareness

Because of its strong relationship to the use of learning strategies, one of the goals of learner training is to help shape L2 students' metalinguistic awareness and epistemological beliefs. A strong connection has been found between students' beliefs and their language learning behaviors. Indeed, students' strategy use has been found many times over to be consistent with the beliefs they hold about the processes of SLA (Abraham & Vann, 1987; Horwitz, 1985, 1987, 1988; Kalaja, 1995; Kern, 1995; Mori, 1999a; Wenden, 1998). Abraham and Vann's (1987) quote clearly illustrates the

relationship between students' beliefs and the behavior that results from them:

We suggest that learners have, at some level of consciousness, a philosophy of how language is learned. This philosophy guides the approach they take in language learning situations, which in turn is manifested in observable (and unobservable) strategies used in learning and communication. (1987, p. 96)

There is substantial evidence that supports the claim that American L2 students possess strong beliefs about how languages are learned. O'Malley and colleagues (1985) report that even students at low levels of L2 proficiency are metalinguistically aware of their SLA processes to some degree. Horwitz's (1988) groundbreaking study of students of German, French, and Spanish confirmed this finding. Her 241 beginner-level university students exhibited an overwhelming tendency to view language learning as simply translating from English by learning the grammar rules and vocabulary of the L2. The students surveyed also believed strongly in repetition and practice as effective means to learning. Truscott (1999) echoes this finding in his claim that students unknowingly adhere to behaviorist notions that relate language learning to habit formation. Furthermore, O'Malley and colleagues (1985) found that the type of strategy most frequently used by the ESL students in their study was repetition. Despite some degree of agreement on this issue, Mori's (1999b) study of 47 advanced students of Japanese as a second language found that most repetition strategies were neither frequently used nor perceived as very helpful. However, this finding must be considered with caution: Students' proficiency and language learning experience may have affected their metalinguistic awareness and the perceived helpfulness of the learning strategies in question.

Indeed, students' beliefs seem to result in part from their experience in the language learning classroom. For example,

Mori's (1999a) study of 187 American university students of various proficiency levels of Japanese suggests that their understanding of L2 processes are at least in part a function of what and how much they have experienced in previous language classes. Kern (1995) also warns of the potential for a negative impact when instructors' actions do not reflect the current state of language learning and, in effect, reinforce or even sow mistaken ideas in the minds of their students.

On the other hand, the benefits of an enhanced and accurate metalinguistic awareness are many. As early as 1983, Gass noted that being able to "think and talk about language" (1983, p. 277) enables more accurate L1-L2 comparisons and promotes self-correction and self-monitoring. More aware students are more likely to seek out and apply learning strategies appropriate to their learning style (Cohen, 1998; Nunan, 1997; Oxford, 2003a; Scarcella & Oxford, 1992).

The problem with metalinguistic awareness lies in students' beliefs, which have a tendency to be misguided (e.g., relating language learning to habit formation). Horwitz (1988) claims that their "misbeliefs" are attributable to having been exposed to "common and sometimes contradictory notions" (p. 283) about how languages are learned, a fact that she believes instructors must take into consideration. Holec (1987) takes this argument one step further, arguing that L2 students need a thorough "deconditioning" (p. 152) in order to rewrite their understanding of language learning. This is accomplished by challenging students' beliefs and including information regarding the nature of L2 acquisition as a part of everyday class discussions.

Learning Strategies and Styles

Another variable closely related to the appropriate or inappropriate use of learning strategies is learner styles. Learning style, unlike the specific behaviors that define learning strategies, is the more global approach that an individual takes in learning the L2 (Oxford, 2001b, 2003a; Reid, 1998).

The connection between styles and strategies has been well researched. To begin a description of the nature of this connection, it should be noted that styles are considered to be relatively permanent characteristics of an individual, while strategy type and use have been shown to vary according to several factors such as amount of language learning experience, levels of metalinguistic awareness, and attitude toward the learning task (Carson & Longhini, 2002; Fan, 2003). While styles seem to be set in the student, strategies provide a more promising prospect in terms of teachability and potential for improvement. Many L2 researchers, therefore, have been more active in their efforts to enhance students' strategy usage (Oxford, 2003a; Reid, 1998).

Another important aspect of the connection between styles and strategies is that strategies do not function independently of styles (Cohen, 1998). Carson and Longhini's (2002) diary study showed that while the strategies used by the diarist did vary, they remained consistent with learning style. Bull and Ma (2001) postulate that the connection between students' styles and consequential strategy preferences must be taken into account when planning strategies training. They also propose a new approach to strategy training and awareness raising that is individualized to more aptly meet the stylistic needs of each student. What Bull and Ma's suggestion may lack in practicality, it makes up for in theory, since numerous scholars have pointed out the need to take styles into account when studying or treating learning strategies use (Cohen, 1998; Fan, 2003; Luján-Ortega & Clark-Carter, 2000; O'Malley & Chamot, 1990; Oxford, 2001b, 2003a; Reid, 1998). In sum, any attempted depiction of the multivariate nature of learning strategies that is devoid of a thorough consideration of learning styles would be severely deficient.

Gender

In addition to learning styles, other important internal factors have received much attention in the research literature. Perhaps

the most outwardly apparent focus of the research on individual differences is gender. With respect to gender and learning strategies use, one result common to many studies is that women possess a greater propensity to use learning strategies than men (e.g., Oxford & Nyikos, 1989; Sheorey & Mokhtari, 2001). Green and Oxford (1995) studied the variation of learning strategies use by 374 Puerto Rican students of ESL in relation to their proficiency level and gender. Their findings, for the most part, replicate those of earlier studies in that the female participants used more learning strategies than the male. Interestingly, several of the strategies that were female-specific (e.g., rapport-seeking, elicitation of comment by the speaker) were typical of women's conversational style as well (see Tannen 1986, 1990). The results also point to what the researchers refer to as bedrock strategies, i.e., those strategies used by learners irrespective of level or gender. Jiménez Catalán's (2003) study offers support for Green and Oxford's bedrock strategies. Her investigation of vocabulary learning strategies usage by 581 students of Basque and ESL in Spain found that, in addition to overall greater learning strategies use by females, 8 out of the 10 most common strategies are used by both men and women. Further research is needed to test bedrock strategy use by more advanced students in order to more fully develop this concept.

Motivation

Another consistent finding in the literature on learning strategies and learning strategies instruction is that learners who are more motivated tend to use more learning strategies. Dörnyei (2003), in his extensive review of recent L2 motivation research, goes so far as to say that occasions in which a student chooses to use learning strategies are, by definition, examples of motivated language learning behavior. More specifically, students with greater motivation not only employ a larger number of learning strategies, but they also recognize that learning an L2 is not merely a matter of amassing

knowledge and rehearsing skills (Gan et al., 2004). What Gan and colleagues are suggesting is a relationship between L2 student motivation and metalinguistic awareness. Dörnyei and Skehan (2003) are even more direct when they assert that self-regulation, which is also strongly related to learning strategies, and motivation “are inextricably bound together, as they both concern the antecedents of increased learner achievements” (p. 595).

Nunan (1997) makes the boldest of all claims in saying that including learning strategies instruction in the L2 curriculum actually leads to an increase in student motivation. One problem with his assertion is that it fails to recognize a student's different types of motivation. For example, if an activity or technique for learning language or learning strategies does not seem effective to students, it will be less effective (Gan et al., 2004; Green, 1993; Peacock, 2001; Reid, 1987; Schulz, 2001). Another potential problem with Nunan's statement is the causal relationship he depicts between learning strategies training and increased motivation. He concludes that the motivation of the participants in his study increased as a result of the strategies training, and not due to some combination of other external or internal factors (e.g., success in language tasks).

Of interest to this discussion of motivation are the differences in learning strategies usage by students with varying types of motivation. The field of SLA traditionally has recognized two major dichotomies in motivation. The first views one's propensity toward language learning in terms of goals. Language study is either integrative—an effort to become part of the L2 community—or instrumental—an attempt to serve a specific objective (e.g., make more money) (Gardner & Lambert, 1959, 1972; Noels et al., 1999). The second distinguishes between extrinsic motivation, defined as the origin of the motivation, that is, an external factor creates the learner's motivation, and intrinsic motivation, that is, one

based on learner internal factors (e.g., self-improvement) (Brown, 2000).

On this very distinction, Noels and her colleagues have pioneered a robust research agenda studying different types of motivation and their impact on other factors that affect language learning such as learning strategies (Noels, 2001, 2003; Noels et al., 1999). Their work expands on a variant of the intrinsic/extrinsic paradigm called self-determination theory put forth in the mid-1980s (see Deci & Ryan, 1985). Self-determination is defined by Noels (2001) as “the extent to which the goal for performing an activity is . . . chosen freely by the individual” (p. 101). Within this framework, the perspective of Noels and her colleagues emphasizes the degree of self-regulation necessary to accomplish language learning tasks, a construct that we have tied repeatedly to learning strategies use (see section on Metalinguistic Awareness).

Proficiency Level

Learner proficiency in the L2 also is believed to affect the use of learning strategies. Oxford (2003b) reports on multiple studies that have used her Strategy Inventory for Language Learning (SILL) to measure the relationship between strategy use and proficiency. Most found the relationship to be of either a linear (e.g., Green & Oxford, 1995; Oxford & Ehrman as cited in Oxford, 2003b) or curvilinear nature (e.g., Phillips as cited in Oxford, 2003b). Linear is defined as a positive relationship between increases in proficiency and learning strategies use; curvilinear refers to an initial correlation between the two, followed by a decrease in learning strategies use as language proficiency continues to improve. Oxford explains this somewhat perplexing finding by suggesting that after attaining a certain level of competence in the L2, advanced students' learning strategies use becomes increasingly automatic and therefore less available to conscious inspection.

O'Malley and colleagues (1985) studied beginning- and intermediate-level ESL students' strategy use. They found that

while both levels used cognitive strategies more frequently than metacognitive ones, the intermediate group was more likely to use metacognitive strategies—a finding that could be attributed to the enhanced metalinguistic sensitivity and awareness of the more experienced intermediate students, as reported by Prokop, Fearon, and Rochet (1982). Prokop and colleagues' study of university students in Canada, as well as the work of Sheorey and Mokhtari (2001), found that lower-level students' learning strategies more often were based on repetition, while more advanced students' learning strategies were those that showed a deeper understanding of the systematic nature of the L2. It is perhaps with this sentiment in mind that Cohen (1998) suggests that different strategies are more helpful at different levels of language ability.

Student vs. Instructor Perceptions

As we turn to the importance of learning strategies training and instruction, it is crucial that we point out the gap that exists between student and instructor perceptions. This gap, if not properly addressed, could hinder strategy instruction. A significant body of evidence supports a difference in perceptions between instructors and students as to what constitutes efficacy in language teaching (Noels, 2001; Nunan, 1997; Peacock, 2001; Plonsky & Mills, 2006; Schulz, 2001). Research has shown repeatedly that this difference is counterproductive to students' progress in the L2 (Garrett & Shortall, 2002; Morris & Tarone, 2003; Noels et al., 1999; Reid, 1987). Kern (1995) employed the Beliefs About Language Learning Inventory, an instrument created by Horwitz (1985, 1988) to measure learners' beliefs in five areas: (1) the difficulty of language learning, (2) foreign language aptitude, (3) the nature of language learning, (4) strategies of communication and learning, and (5) learner motivations and expectations. The purpose of his study was twofold: His first objective was to add to the foundation established by Horwitz's seminal work on

student beliefs. The second objective was to compare student and instructor perceptions over time to see what effect the instructors' beliefs, operationalized as their in-class techniques, might have on the students. The results were insightful, with the most relevant factor being the level of analysis. Global analyses and group means showed strong overall similarities among all students, while analyses at the individual and class level revealed a more complex portrait of the students' epistemological belief system, one that contrasted starkly to that of their instructors. The article concludes by calling for more instructor-initiated dialogue with students. Kern (1995) also reminds us that there is often a difference between instructors' beliefs about language learning and their day-to-day practices in the classroom, a situation that, ironically, may be a contributor to the significant difference between the two groups of students in the study.

Unfortunately, beliefs about learning strategies are not exempt from this unconstructive disparity of perceptions. O'Malley and colleagues' (1985) study showed that L2 instructors were largely unaware of the learning strategies being used by their students. Nunan (1995) and others (Hyland, 2000, 2003; McCargar, 1993; Peacock, 2001) agree with Kern's (1995) comments and suggest that instructors begin to deal with the differences between them and their students by finding out what their students think and how they prefer to learn. Oxford (2001b) insists that instructors also must objectively explore their own styles, strategies, and beliefs regarding language learning. Once the instructor is aware of how both parties perceive the L2 learning process, he or she is better equipped to step into the role of diagnostician and learner trainer in addition to language instructor (Weaver & Cohen, 1998).

Conclusion

Summary and Teaching Implications

This synthesis has brought to light the complex yet systematic interplay of vari-

ables that affect learning strategies usage. Despite attempts beginning in the 1970s to define the parameters of the successful language learner, work on individual differences has shown us that no precise formula for effective language learning exists. Likewise, there is no given set of learning strategies that works for everyone. Time and again the results and conclusions presented agree that appropriate and effective learning strategies use is related to several interrelated factors, including but not limited to learner autonomy, metalinguistic awareness, learning styles, gender, motivation, proficiency, and perceived effectiveness of learning strategies.

With respect to learner autonomy, the consensus is that the more students self-regulate, the more learning strategies they will use. This assertion is not surprising if viewed from Dörnyei's perspective that use of language learning strategies occurs only "... of their [the students'] own free will" (2003, p. 16). As we have seen, intimately tied to learner autonomy is motivation, which also has been shown to correlate positively with learning strategies use and the perceived helpfulness of in-class activities and teaching styles (Dörnyei & Skehan, 2003; Noels, 2001).

Two concepts central to understanding the complexity of learning strategies' use—motivation and metalinguistic awareness—share a positive relationship with learning strategies (e.g., Abraham & Vann, 1987). In this area of learner awareness and beliefs, however, the focus is less on the number of learning strategies and more on the types of strategies used. This process is summed up concisely by Kalaja (1995) when he states that students' strategy usage reflects their underlying beliefs about how languages are learned. With this in mind, instructors whose students possess misconstrued notions about language learning need to provide them with guidance to avoid their tendency to use less effective strategies—or to use more effective ones inappropriately.

Learning styles, the inherent, general approaches with which a student pursues

a task, also factor into which learning strategies may be appropriate. It appears that some strategies are more effective than others for learners with certain styles. Therefore, instructors engaging in strategies training are strongly advised to consider their students' individual and collective styles and learning preferences (Bull & Ma, 2001; Fan, 2003; Oxford, 2003b; Yamamorio et al., 2003).

The differences in perceptions between students and instructors is also important. Studies in this area have shown not only that there are significant differences between instructors' and students' perceptions of what constitutes effective practices in language teaching and learning, but also that this perceptual gap can be counterproductive to SLA.

To address this problem, studies by Kern (1995) and others have shown that students' beliefs are affected implicitly by their instructors' instructional techniques. However, students' misperceptions about language learning often need more proactive, interventionist approaches. Entering into a dialogue with students, either in formal learner training sessions or on more casual occasions, can help shape the strategies they use and their deeper perceptions of how languages are learned. The purpose behind such practices is to influence students' beliefs to more accurately reflect current knowledge of the language learning process so that their efforts, as well as those of their instructors, may be more successful.

Our analysis of the literature points to three basic recommendations:

1. Instructors should develop simple surveys (see Appendix A) at the beginning of their courses to identify and evaluate student beliefs about learning and the learning strategies they use. In doing this, instructors can become aware of potential gaps in students' perceptions and direct their instruction of strategies in a more focused manner.
2. Instructors must develop an ongoing dialogue with students throughout the duration of the course by integrating

brief discussions regarding learning strategies that can be applied to the specific topics being studied. These strategies, in turn, must be connected to successful outcomes so that students can see clearly how they lead to successful learning and develop the motivation to use them.

3. Instructors also must set aside time to directly address learning strategies, for example, by using training sessions as outlined in Plonsky and Mills (2006). In these training sessions, students' attention can be directed to specific learning strategies and how they can be tied to teaching techniques. In so doing, the prevalent behaviorist perspective among students will give way to a more cognitive awareness of language and successful learning.

Areas for Future Research

This article has touched on numerous topics regarding learning strategies. In order to better define the nature of the relationship between learning strategies, the factors that affect their usage, and their possible benefits for second language learning, further research is needed. Although strategies training has been shown to benefit learners, future research must investigate whether strategy preference can be altered or if it is indicative of more inherent characteristics that students bring with them to the classroom, as is believed in the case of learning styles (Gu & Johnson, 1996; Nunan, 1995). Perhaps more importantly, Gan and colleagues (2004) recommend studies of the extent to which student beliefs about language learning can be altered. This approach to learner training has enormous potential. Instead of training students with strategies that have not been proven empirically or that only address temporary and superficial solutions to students' difficulties with language, instructors can guide students to more effective and long-lasting learning strategies use. This new perspective to learning strategies training could, in turn, change the fundamental beliefs that

students have about learning a language, and even create or reinforce students' motivation for successful language learning.

References

- Abraham, R. G., & Vann, R. J. (1987). Strategies of two language learners: A case study. In A. Wended & J. Rubin (Eds.), *Learner strategies in language learning* (pp. 85–102). Englewood Cliffs, NJ: Prentice Hall.
- Allen, S. (2003). An analytic comparison of three models of reading strategy instruction. *International Review of Applied Linguistics*, 41, 319–338.
- Allwright, R. L. (1984). Why don't learners learn what teachers teach? The interaction hypothesis. In D. M. Singleton & D. G. Little (Eds.), *Language learning in formal and informal contexts* (pp. 3–18). Dublin, Ireland: Irish Association for Applied Linguistics.
- Bialystok, E. (1990). *Communication strategies: A psychological analysis of second-language use*. Cambridge, MA: Basil Blackwell.
- Brown, H. D. (2000). *Principles of language learning and teaching*, 4th ed. New York: Longman.
- Brown, T. S., & Perry, F. L. (1991). A comparison of three learning strategies for ESL vocabulary acquisition. *TESOL Quarterly*, 25, 655–670.
- Bull, S., & Ma, Y. (2001). Raising learner awareness of language learning strategies in situations of limited resources. *Interactive Learning Environments*, 9, 171–200.
- Carson, J. G., & Longhini, A. (2002). Focusing on learning styles and strategies: A diary study in an immersion setting. *Language Learning*, 52, 401–438.
- Chamot, A. U. (1988). *Learning strategy instruction for writing in French: A possible script*. McLean, VA: Interstate Research Associates.
- Cohen, A. D. (1998). *Strategies in learning and using a second language*. New York: Addison Wesley Longman.
- Deci, E. L., & Ryan, R. M. (1985) *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- Dörnyei, Z. (1995). On the teachability of communication strategies. *TESOL Quarterly*, 29, 55–84.
- Dörnyei, Z. (2003). Attitudes, orientations, and motivations in language learning:

- Advances in theory, research, and applications. *Language Learning*, 53, 3–32.
- Dörnyei, Z., & Skehan, P. (2003). Individual differences in L2 learning. In C. J. Doughty & M. H. Long (Eds.), *The handbook of second language acquisition* (pp. 589–630). Malden, MA: Blackwell.
- Fan, M. Y. (2003). Frequency of use, perceived usefulness, and actual usefulness of second language vocabulary strategies: A study of Hong Kong learners. *Modern Language Journal*, 87, 222–241.
- Gan, Z., Humphreys, G., & Hamp-Lyons, L. (2004). Understanding successful and unsuccessful EFL students in Chinese universities. *Modern Language Journal*, 88, 229–244.
- Gardner, R. C., & Lambert, W. E. (1959). Motivational variables in second language acquisition. *Canadian Journal of Psychology*, 13, 266–272.
- Gardner, R. C., & Lambert, W. E. (1972). *Attitudes and motivation in second language learning*. Rowley, MA: Newbury House.
- Garrett, P., & Shortall, T. (2002). Learners' evaluations of teacher-fronted and student-centered classroom activities. *Language Teaching Research*, 6, 25–57.
- Gass, S. (1983). The development of L2 intuitions. *TESOL Quarterly*, 17, 273–291.
- Green, J. M. (1993). Student attitudes toward communicative and non-communicative activities: Do enjoyment and effectiveness go together? *Modern Language Journal*, 77, 1–10.
- Green, J. M., & Oxford, R. (1995). A close look at learning strategies, L2 proficiency, and gender. *TESOL Quarterly*, 29, 261–297.
- Gu, Y., & Johnson, R. K. (1996). Vocabulary learning strategies and language learning outcomes. *Language Learning*, 46, 643–679.
- Hedgcock, J., & Lefkowitz, N. (1994). Feedback on feedback: Assessing learner receptivity to teacher response in L2 composing. *Journal of Second Language Writing*, 3, 141–163.
- Holec, H. (1987). The learner as manager: Managing learning or managing to learn? In A. Wenden & J. Rubin (Eds.), *Learner strategies in language learning* (pp. 145–157). Englewood Cliffs, NJ: Prentice Hall.
- Horwitz, E. K. (1985). Using student beliefs about language learning and teaching in the foreign language methods course. *Foreign Language Annals*, 18, 333–340.
- Horwitz, E. K. (1987). Surveying student beliefs about language learning. In A. Wenden & J. Rubin (Eds.), *Learner strategies in language learning* (pp. 119–129). Englewood Cliffs, NJ: Prentice Hall.
- Horwitz, E. K. (1988). The beliefs about language learning of beginning university foreign language students. *Modern Language Journal*, 72, 283–294.
- Hyland, F. (2000). ESL writers and feedback: Giving more autonomy to students. *Language Teaching Research*, 4, 33–54.
- Hyland, F. (2003). Focusing on form: Student engagement with teacher feedback. *System*, 31, 217–230.
- Jiménez Catalán, R. M. (2003). Sex differences in L2 vocabulary learning strategies. *International Journal of Applied Linguistics*, 13, 54–77.
- Kalaja, P. (1995). Student beliefs (or metacognitive knowledge) about SLA reconsidered. *International Journal of Applied Linguistics*, 5, 191–204.
- Kern, R. G. (1995). Students' and teachers' beliefs about language learning. *Foreign Language Annals*, 28, 71–92.
- Long, M. H. (1983). Does second language instruction make a difference? A review of the research. *TESOL Quarterly*, 17, 359–382.
- Luján-Ortega, V., & Clark-Carter, D. (2000). Individual differences, strategic performance and achievement in second language learners of Spanish. *Studia Linguistica [Studies in Linguistics]*, 54, 280–287.
- Macaro, M. (2001). *Learning strategies in second and foreign classrooms*. New York: Continuum.
- MacIntyre, P. D., & Noels, K. A. (1996). Using social-psychological variables to predict the use of language learning strategies. *Foreign Language Annals*, 29, 373–386.
- McCargar, D. (1993). Teacher and student role expectations: Cross-cultural differences and implications. *Modern Language Journal*, 77, 192–207.
- McDonough, S. (2002). *Applied linguistics in language education*. New York: Oxford University Press.
- Miley, W. M., & Gonsalves, S. (2003). What you don't know can hurt you: Students' perceptions of professors' annoying teaching habits. *College Student Journal*, 37, 447–456.

- Mori, Y. (1999a). Epistemological beliefs and language learning beliefs: What do language learners believe about their learning? *Language Learning*, 49, 377–415.
- Mori, Y. (1999b). Beliefs about language learning and their relationship to the ability to integrate information from word parts and context in interpreting novel Kanji words. *Modern Language Journal*, 83, 534–547.
- Morris, F., & Tarone, E. (2003). Impact of classroom dynamics on the effectiveness of recasts in second language acquisition. *Language Learning*, 53, 325–368.
- Nation, I. S. P. (2001). *Learning vocabulary in another language*. Cambridge, UK: Cambridge University Press.
- Noels, K. A. (2001). Learning Spanish as a second language: Learners' orientations and perceptions of their teachers' communication style. *Language Learning*, 51, 107–144.
- Noels, K. A. (2003). Learning Spanish as a second language: Learners' orientations and perceptions of their teachers' communication style. *Language Learning*, 53, 99–136.
- Noels, K. A., Clément, R., & Pelletier, L. G. (1999). Perceptions of teachers' communicative style and students' intrinsic and extrinsic motivation. *Modern Language Journal*, 83, 23–33.
- Norris, J. M., & Ortega, L. (2000). Effectiveness of L2 instruction: A research synthesis and quantitative meta-analysis. *Language Learning*, 50, 417–428.
- Nunan, D. (1995). Closing the gap between learning and instruction. *TESOL Quarterly*, 29, 133–158.
- Nunan, D. (1997). Does learner strategy training make a difference? *Linguas Modernas* [Modern Languages], 24, 123–142.
- O'Malley, J. M., & Chamot, A. U. (1990). *Learning strategies in second language acquisition*. Cambridge, UK: Cambridge University Press.
- O'Malley, J. M., Chamot, A. U., Stewner-Manzanares, G., Kupper, L., & Russo, R. P. (1985). Learning strategies used by beginning and intermediate ESL students. *Language Learning*, 35, 21–46.
- Oxford, R. L. (1990). *Language learning strategies: What every teacher should know*. Boston: Heinle & Heinle.
- Oxford, R. L. (1999). Relationships between second language learning strategies and language proficiency in the context of learner autonomy and self-regulation. *Revista Canaria de Estudios Ingleses* [Canarian Journal of English Studies], 38, 109–126.
- Oxford, R. L. (2001a). The bleached bones of a story: Learners' constructions of language teachers. In M. P. Breen (Ed.), *Learner contributions to language learning: New directions in research* (pp. 86–111). New York: Longman.
- Oxford, R. L. (2001b). Language learning styles and strategies. In M. Celce-Murcia (Ed.), *Teaching English as a second or foreign language*, 3rd ed. (pp. 359–366). Boston: Heinle & Heinle.
- Oxford, R. L. (2003a). Language learning styles and strategies: Concepts and relationships. *International Review of Applied Linguistics*, 41, 271–278.
- Oxford, R. L. (2003b). Relationships between second language learning strategies and proficiency in the context of learner autonomy and self-regulation. *Revista Canaria de Estudios Ingleses* [Canarian Journal of English Studies], 38, 109–126.
- Oxford, R. L., & Nyikos, M. (1989). Variables affecting choice of language learning strategies by university students. *Modern Language Journal*, 73, 291–300.
- Peacock, M. (2001). Match or mismatch? Learning styles and teaching styles in EFL. *International Journal of Applied Linguistics*, 11, 1–20.
- Plonsky, L., & Mills, S. V. (2006). An exploratory study of differing perceptions of error correction between a teacher and students: Bridging the gap. *Applied Language Learning*, 16, 55–74.
- Prokop, M., Fearon, D., & Rochet, B. (1982). *Second language learning strategies in formal instruction context*. Edmonton: University of Alberta.
- Purpura, J. E. (1997). An analysis of the relationships between test takers' cognitive and metacognitive strategy use and second language test performance. *Language Learning*, 47, 289–325.
- Rees-Miller, J. (1993). A critical appraisal of learner training: Theoretical bases and teaching implications. *TESOL Quarterly*, 27, 679–689.
- Reid, J. M. (1987). The learning style preferences of ESL students. *TESOL Quarterly*, 21, 87–111.
- Reid, J. (1998). *Understanding learning styles in the second language classroom*. Upper Saddle River, NJ: Prentice Hall.

- Scarcella, R. C., & Oxford, R. L. (1992). *The tapestry of language learning: The individual in the communicative classroom*. Boston: Heinle & Heinle.
- Schulz, R. A. (2001). Cultural differences in student and teacher perceptions concerning the role of grammar instruction and corrective feedback. *Modern Language Journal*, 85, 244–258.
- Sheorey, R., & Mokhtari, K. (2001). Differences in the metacognitive awareness of reading strategies among native and non-native readers. *System*, 29, 431–449.
- Tannen, D. (1986). *That's not what I meant!* New York: Morrow.
- Tannen, D. (1990). *You just don't understand*. New York: Ballentine.
- Terrell, T. D. (1977). A natural approach to second language acquisition and learning. *Modern Language Journal*, 61, 325–337.
- Truscott, J. (1999). What's wrong with oral grammar correction. *Canadian Modern Language Review*, 55, 437–456.
- Tse, L. (2000). Student perceptions of foreign language study: A qualitative analysis of foreign language autobiographies. *Modern Language Journal*, 84, 69–84.
- Weaver, S. F., & Cohen, A. D. (1998). Making strategy training a reality in the foreign language curriculum. In A. D. Cohen (Ed.), *Strategies in learning and using a second language* (pp. 66–106). New York: Addison Wesley Longman.
- Wenden, A. L. (1985). Learner strategies. *TESOL Newsletter*, 19, 1–7.
- Wenden, A. L. (1992). *Learner strategies for learner autonomy*. Englewood Cliffs, NJ: Prentice Hall Regents.
- Wenden, A. L. (1998). Metacognitive knowledge and language learning. *Applied Linguistics*, 19, 515–537.
- Wenden, A. L., & Rubin, J. (Eds.) (1987). *Learner strategies in language learning*. Oxford, UK: Pergamon Press.
- Yamamorio, K., Isoda, T., Hiromori, T., & Oxford, R. L. (2003). Using cluster analysis to uncover L2 learner differences in strategy use, will to learn, and achievement over time. *International Review of Applied Linguistics*, 41, 381–409.

APPENDIX A

Sample Survey

The following is a sample survey designed for college students taking their first language class. It can be adjusted and used with secondary students of language. Some of the questions deal with learning strategies and students' opinions about the strategies, while others evaluate beliefs about language learning more generally. Both types of questions are useful and should be included when writing a questionnaire intended to explore students' beliefs.

SAMPLE SURVEY

Beliefs About Language Learning and Language Learning Strategies

This is an anonymous questionnaire designed to extract your opinions on how to go about learning a second language. As you read each statement, consider your beliefs as well as the strategies you use to help you learn the language you are studying.

There are no right or wrong answers and the opinions you express here will in no way affect your grade. In the line provided, please write the letter that best describes the extent to which you agree or disagree with the following statements:

A	B	C	D	E
I disagree	I somewhat disagree	No opinion	I somewhat agree	I agree

- ___ 1. Learning a second language is like learning anything else: Practice makes perfect.
- ___ 2. The best way to learn a language is to have as much contact with native speakers of that language as possible.
- ___ 3. Comparing the forms and structures I am learning to English helps me understand them better.
- ___ 4. I know in advance how I will deal with unfamiliar words and structures in a written text.
- ___ 5. Before speaking, I plan what I will say and how I will say it.
- ___ 6. My feelings and/or emotional state do not affect my ability to learn, use, or comprehend the language I am studying.
- ___ 7. Learning a second language is essentially the same as a child learning his or her first language.
- ___ 8. Some languages are more difficult to learn than others.
- ___ 9. Some people are better at learning languages than others.
- ___ 10. I learn best when I use the language to talk to others.