A diary study focusing on listening and speaking: The evolving interaction of learning styles and learning strategies in a motivated, advanced ESL learner

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Abstract

Using a personal diary, the first author, an advanced learner of English as a second language (ESL) who desires to improve her academic language competence, focuses on her own evolving learning styles and learning strategies for ESL listening and speaking while living in the US. The author examines dual contexts: the internal context of attitudes, motivations, and emotions and the external context of the unfamiliar country, its culture, and the author's observable interactions with people in that culture. She looks at how the internal and external contexts work together to affect her styles and strategies for learning. For this introverted, reflective, and visual learner, learning by listening to lectures and actively participating in classroom conversations are not easy tasks, but her diary shows that she eventually manages the different aspects of her overall learning style and learns to use relevant strategies that make her a more active classroom participant.

1. Introduction

Compared with interviews or questionnaires, learner journals or diaries as data collection instruments are often less structured and therefore might generate interesting data that will not usually appear in these other modes. Pavlenko (2001, 2002) points out that personal narratives (including diaries and autobiographies) provide important information about the experiences, difficulties, motivations, losses, and gains of language learners. Oxford (2011) writes that learner narratives, including diaries, allow us to understand two types of contexts, the observable or external context and the internal (attitudinal, motivational, emotional, and interpretive) context, as well as the complexity of the interactions between these contexts. In addition, learner diaries are perfect for uncovering learning styles and strategies and discerning the interaction between these factors (Oxford, Lavine, Hollaway, Felkins, & Saleh, 1996).

One purpose of this diary study is to report and analyze the complexity of the interactions between external and internal contexts that the first author (also known in this article as the researcher), who is an ESL learner in the US, experienced while trying to achieve her goal: to improve her English listening and speaking skills through academic courses and conferences. Another related purpose is to discuss the author's perceived difficulties and creative development during this process. Still another key purpose – the most important one – is to portray learning styles, learning strategies, and affective variables, such as motivation, through the lens of the author's diary.

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Please cite this article in press as: Ma, R., & Oxford, R. L., A diary study focusing on listening and speaking: The evolving interaction of learning styles and learning strategies in a motivated, advanced ESL learner, System (2014), http://dx.doi.org/10.1016/j.system.2013.12.010
The next three sections present the research review, the theoretical framework, and the methodology of the present study. The subsequent sections offer results and interpretations, conclusions, and instructional implications.

2. Research review

This review begins with individual differences in general and then presents the research on particular individual differences: learning styles, learning strategies, learning strategies for listening and speaking, and the features of advanced ESL learners.

2.1. Individual differences

Given generally the same external learning environments and access to learning opportunities, why do various learners achieve different results with language learning? This question has led to the exploration of individual differences of second and foreign language learners. These differences not only differentiate language learners from each other but are also believed to have important effects on language learning (Benson & Gao, 2008; Bowden, Sanz, & Stafford, 2005).

Numerous studies focus on the effects of individual differences on learners’ success in language learning (Ellis, 1994). Oxford and Ehrman (1990, 1993) explore individual differences such as gender, age, nationality, motivation, and academic or career orientation. Ehrman, Leaver, and Oxford (2003) discuss three major categories of learner differences – learning styles, learning strategies, and affective factors – while recognizing the existence of other influential individual differences. Benson and Gao (2008) divide learners’ individual differences into two categories: (a) innate attributes such as gender, age, language learning aptitude, personality, and learning styles; and (b) acquired attributes such as attitudes, motivation, beliefs, and learning strategy use.

Oxford (2013a) discusses the influence of the following individual differences on language learning: (a) aptitude, seen as malleable through experience and instruction rather than a fully innate or static trait; (b) demographic factors of gender and age; (c) personal features of personality, self-esteem, self-concept, and self-efficacy; (d) culturally influenced concern for “face” (social impression) and self-constructs of interdependence or independence; (e) affective variables, such as investment, motivation, emotions, and willingness to communicate; and (f) cognitive aspects, such as cognitive learning style, future time perspective, ability to manage cognitive load, and schema development. Many of these individual differences, says Oxford (2011, 2013a), influence learning strategy use. The study reported here focuses largely on the interaction of learning styles and learning strategies in a highly motivated, advanced English language learner in English-medium academic courses.

2.2. Learning styles

Kolb (1984, cited in Nel, 2008) argues that “Individual learners have particular strengths which form the basis of their preferred learning style” (p. 50). According to Keefe (1979), learning styles are rather stable behaviors or ways of functioning that indicate how learners perceive and interact with the learning environment. Learning styles have cognitive, affective, personality-related, and physiological characteristics (Ehrman et al., 2003; Keefe, 1979). Emphasizing the cognitive component, Reid (1997) describes learning styles as the individual’s preferred, habitual ways of learning, i.e., of processing and retaining new information and developing skills.

Curry (1983) presents a metaphorical concept of learning styles as an onion with many layers, some variable and others more permanent. The first layer consists of instructional and environmental preferences, which are not fixed; the second layer is information-processing preferences; and the next, most permanent layer is composed of personality characteristics of style. Oxford (2003) contributes a detailed list of learning style dimensions: sensory style dimensions (visual, auditory, and hands-on); cognitive style dimensions (concrete-sequential/abstract-intuitive [intuitive-random], closure-oriented/open, particular/global, and analyzing/synthesizing); and a social-interactional, personality-related style dimension (extroverted/introverted). Regarding the personality aspect of learning style, many teachers think it is closely related to student’s performance in language learning (Ellis, 1994). Oxford and Ehrman (1995) report that the personality-related aspect of learning style has a strong relationship with learning strategy use, which in turn is often related to language outcomes.

Cohen, Oxford, and Chi (2002, in Paige, Cohen, Kappler, Chi, & Lassegard, 2006) add still other learning style dimensions drawn from educational psychology, such as metaphorical/literal, leveling/sharpening, deductive/inductive, field-independent/field-dependent, and reflective/impulsive. Learning styles are influenced not only by psychological factors but also by cultural values. Hale-Benson (1986), in talking about Black children’s learning styles, points out that teachers must appreciate the role of culture in helping to shape learning styles. Nevertheless, neither culture nor nationality determines learning style.

Burke and Doolan (2006) assert that learners will learn “more, [and] more quickly” if they “use, rather than ignore their natural styles” and “with less frustration than they do when trying to use someone else’s style” (p. 164). However, Sims and Sims (2006) describe the process of changing from the originally preferred learning style to an adapted learning style and to an optimal learning style, which is the most suitable style for attaining the learning goal. They also emphasize the importance of style switching for minority students. Somewhat similarly, the language field has more often promoted what Oxford and Lavine (1991) call style-stretching, which involves the learner’s employing new learning strategies that might not fit his or her stylistic comfort zone or culturally preferred patterns. Oxford and Lavine contend that it might be difficult to change or switch...
learning styles totally, but it is possible for a learner to stretch his or her learning style by adopting new, less comfortable strategies as necessary to fulfill a given learning goal.

2.3. Learning strategies

Language learning strategies are defined as the specific steps learners consciously take to accomplish certain language tasks. Learning strategies are “specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations” (Oxford, 1990, p. 8). Oxford (2011) presents a taxonomy of four strategy categories: metacognitive strategies (part of a larger set of “metastrategies”), cognitive strategies, affective strategies, and social-interactional strategies. Metacognitive strategies, such as planning, evaluating, and monitoring, are used for managing the whole learning process; cognitive strategies are used for processing information mentally; affective strategies are used for managing the affective (motivational, emotional, and attitudinal) side of learning; and social-interactional strategies are used for learning together and interacting with others. Of all the individual differences, language learning strategies are those that can be most easily controlled by the learner (Benson & Gao, 2008; Oxford, 1990, 2011). In the present diary study, it will also be obvious that compared with learning style and affective variables, learning strategies are much more inherently proactive. For a discussion of learning strategies in the context of learning styles and motivation, see Cohen and Dörnyei (2002).

Researchers generally think the value of a learning strategy depends on the situation, the task, the learner's goal, and the learner’s characteristics (including learning style, interests, time availability, proficiency level, previous experiences, and other factors). To be successful, learners must select and combine relevant strategies to meet varying conditions in different situations by analyzing the tasks and themselves (Oxford, 2011; Rubin & McCoy, 2008; Yamamori, Isoda, Hiromori, & Oxford, 2003). More capable learners will use a more coordinated combination of strategies to achieve their goals (Vandergrift, 2003; Yamamori et al., 2003). Because this diary study focuses on the researcher’s academic listening and speaking in graduate level courses, the research review now turns to learning strategies for listening and speaking.

2.4. Learning strategies for listening and speaking

Anderson (1985) describes three interrelated cognitive processes of listening: perceptual processing, parsing, and utilization. During perceptual processing, the strategies of selective attention and directed attention are very important; during parsing, the strategies of grouping and inferencing are crucial; and during utilization, the strategies of applying and elaborating prior knowledge are vital for assisting comprehension and recall (O’Malley, Chamot, & Küpper, 1989). Investigators report that compared with less skilled learners, more skilled listeners use more metacognitive strategies and more effective combinations of strategies (Mendelsohn & Rubin, 1995; Vandergrift, 2003).

Many strategies for speaking are called communication strategies, which enable learners to compensate for particular deficiencies while speaking (Nakatani, 2006). Dörnyei and Scott (1997) provide a comprehensive review of definitions and taxonomies of communication strategies. They emphasize that scholars have divided communication strategies into two groups: achievement strategies, which help the learner achieve the original communication goals; and reduction strategies, which help the learner avoid solving a communication problem by altering, reducing, or even abandoning the original communication goals.

Oxford (1990) points out that learning strategies of a noncompensatory sort are also helpful for improving speaking. These include metacognitive strategies like planning and monitoring; a range of cognitive strategies that can enhance the vocabulary and grammar necessary for effective speaking; affective strategies to reduce anxiety; and social strategies to encourage interaction. Based on studies done in China, Japan, and the US, Kawai (2008) asserts that “Those who develop good oral skills appear to be frequent strategy users regardless of culture and learning context” (p. 219).

2.5. Characteristics and needs of advanced ESL learners in academic settings

According to the five levels of proficiency described by the Interagency Language Roundtable (ILR, 2012), the researcher assesses herself as at or slightly above level 3, “General Professional Proficiency.” At this level, “students can expect to use the language professionally while having obviously less than native control of linguistic and cultural elements” (Leaver & Shekhtman, 2002, p. 9). Above level 3, learners become even more effective in using the language, especially for professional or academic communication.

A useful definition of communicative competence proposed by Hymes and further developed by Spolsky is as follows: “the ability to communicate with native speakers in real-life situations—authentic interpersonal communication that cannot be separated from the cultural, paralinguistic, and nonverbal aspects of language” (in Leaver & Shekhtman, 2002, p. 9). Academic communicative competence is the ability to communicate with native speakers in real-life academic settings, such as lectures, seminars, conferences, or group discussions. Advanced ESL learners need to be able to do the following:

- understand formal lectures
- give formal speeches/presentations

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Researchers report that metacognitive strategies are very important to advanced learners (Leaver, Ehrman, & Shekhtman, 2005; Leaver & Shekhtman, 2002). Since metacognitive strategies are used to manage and control the whole learning process, one explanation could be that advanced learners are more self-regulated, so they use more metacognitive strategies. An alternative explanation is that as advanced learners use more metacognitive strategies, they become more self-regulated. Li and Qin (2006) point out that advanced learners are often flexible with their strategy use, including being more willing to try strategies that are not compatible with their learning styles. This might be because their motivated task-orientation is stronger than the desire to employ only the comfortable, “old shoe” learning strategies that fit their learning style but that might not fit the task at hand.

The research review has conveyed the importance of learning styles and learning strategies, especially learning strategies for listening and speaking. It has also indicated the characteristics and needs of advanced language learners, such as the individual who is the focus of the present study. The following theoretical framework is based on the research which was just reviewed.

3. Theoretical framework for the research

The theory underpinning this research is that individual difference variables within a given language learner influence each other (e.g., learning styles influence learning strategy use and vice versa) and are also related situationally to the sociocultural environment and to task demands (Oxford, 2011, 2013a; Oxford & Ehrman, 1995). The theory further states that many individual differences are adaptable if the learner is metacognitively alert and has a clear understanding of his or her needs in a given learning situation. The review of existing research and the findings of the present study support these theoretical statements.

4. Methodology

4.1. The diary study

Oxford (2011, 2013b) notes that learner narratives are rich, idiosyncratic, revealing of inner lives and outer circumstances, and reflective of learning events in specific settings and at given times. As for the language learning diary, which is a form of learner narrative, Oxford et al. (1996) define it as “a type of self-report which allows learners to record on a regular basis numerous aspects of their learning process, including but not limited to the use of specific language learning strategies” (p. 20). Diary studies have limitations, such as subjectivity and the use of retrospective data that might be affected by memory capacity (Carson & Longhini, 2002; Oxford et al., 1996). However, many researchers greatly value diaries for providing authentic data that could not be collected through other means (Bailey, 1983; Carson & Longhini, 2002; Oxford et al., 1996; Stakhnevich, 2005).

Bailey (1983) suggests that introspective diary studies and empirical, quantitative research on second language learning are two “approaches of knowing” that can “provide us with very different types of information, and each can inform the other...” (p. 94). Oxford et al. (1996) further emphasize the value of learner diaries for “heightening learners’ own awareness of their strategies as used in language tasks and for uncovering “affective aspects of language learning, such as anxiety and motivation,” and they conclude that “both students and teachers benefit from diaries” (p. 19).

In the present study, the diarist/researcher kept a detailed learning strategy diary during the 85 days from early February until mid-May. During this period, the researcher took two graduate level education courses at a large research university in the US. The 3-credit-hour course, with 40 students, was much more intensive and demanding academically than the 1-credit-hour course, which had 10 students.

Because information received by the mind will be stored briefly in short term memory (STM), but only a portion of that will enter the long term memory (LTM) for later retrieval (Ericsson & Simon, 1980, 1993), the researcher kept a notebook during the classes to write down useful notes, and as soon as possible wrote the diary entries based on the notes. The interval between class time and diary writing was typically a few hours or more. The in-class notes recorded information directly from STM, while the diary entries were retrieved from LTM with the help of the notes as reminders. Since information is stored in our mind in clusters, the researcher learned that writing down key words instead of writing whole sentences during class was an efficient method to keep notes; this abbreviated note-taking method did not disrupt the researcher’s understanding of what was occurring in the classroom.

Sometimes between class meetings, the researcher would reflect on previous sessions and make plans for her learning experience, and these out-of-class metacognitive processes were also recorded in the diary. The diary contains 18 entries of various lengths, from one page to several pages of typed words. The total corpus consists of 13,248 words. Following generally accepted diary study methodology, the researcher edited the original diary by changing people’s names in order to produce a public journal for research (Campbell, 1996). The public version of the diary largely retains the original flow of thoughts and descriptions. The diary entries in the public version also maintain the grammar, punctuation, and spelling used in the original version. The discussion of the diary entries below uses the terms “strategies” and “tactics” synonymously.

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4.2. Background information from surveys

Data from the diary study were amplified by a learning style survey (Cohen et al., 2002) taken by the researcher before the diary study began. While this survey was not part of the diary study, it provides useful background information for understanding the diary results. Based on the survey, the researcher’s learning style is visual, introverted (preferring to study alone or with a very familiar person), reflective (preferring to think before acting and wanting to know all the words and concepts before communicating), detail-oriented, and metaphor-loving; prone to synthesizing, summarizing, and predicting rather than analyzing; and slightly more intuitive-random than concrete-sequential. In addition, the researcher took a learning strategy survey, the Academic English Learning Strategy Questionnaire (Ma, 2009). This survey, also used for background information but not part of the diary study, revealed that the researcher tended to use metacognitive strategies the most often, followed by cognitive strategies and affective strategies, with social-interactional strategies least used.

5. Results and interpretations

This section presents results concerning learning styles and then learning strategies. The findings based on a close scrutiny of the diary data indicate that styles and strategies are intimately interconnected.

5.1. Results concerning learning styles

The diary results related to learning styles emphasize that the researcher is reflective and introverted, and at the same time intuition and the classroom environment were also dynamic variables influencing her English-speaking performance in the learning contexts.

5.1.1. Reflective style

The researcher is very aware of that she is a reflective learner. Near the beginning of the diary, she wrote:

I realize that my learning style is reflective. I am a very “thinking” person, in comparison to “acting” person. (February 17)

The diary recorded quite a few times when the researcher hesitated before speaking up, which reveals characteristics of a reflective learner. The following are two examples:

At the beginning of the class, the professor said something and then asked if there were any questions. Actually I had a question, but because he said the same thing before Spring Break, I dared not to ask him. I really regret that. I am too concerned about being a fool. (March 24)

Many times I tried to speak up, but I felt too timid to do so. Especially when they talked about constant comparison method, I could contribute what I know but I simply could not speak up when I felt so far away from the front. (March 31)

The researcher tends to over-reflect after talking in class or doing a class presentation. Sometimes this over-reflection becomes a distraction, as the following two examples show:

…After I said this point, I became so busy reflecting on what I just said that I did not pay attention to what teacher said next. Strategy: try especially hard to refocus after I talk; reflect on what I said later. Learning style: reflective. Need to compensate the tendency of too much reflection. (February 24)

Then we have an activity called “artifacts.” I like it, because it gave me a chance to connect with my teammate. She shared with me a necklace from her grandma. I shared a tea can from China. It is a wonderful moment. But after the activity, I spent some time thinking about it, so I lost track of what was going on.

(I am a very introverted person. Therefore, I spent time reflecting on things. One sense it is good for me to improve, on the other hand, it makes me hard to move on with the flow of what is going on). So I have to check this. (April 9)

The tendency to over-reflect after a learning event might be related with perfectionism, which, according to Gregersen and Horwitz (2002), is also related to the fear of being criticized by peers or the teacher. Thus, for language learners, it is important to remind oneself that learning comes through making errors and mistakes. It is also recommended for language teachers to deliberately create an error-friendly learning environment, in which mistakes and errors are treated not as things to be avoided, but as necessary steps towards true learning and improvement. Furthermore, Gregersen and Horwitz (2002) point out that teachers with perfectionist tendencies might “inadvertently encourage or develop those tendencies in their students” (p. 569). It is important for such teachers to be aware of that fact.

Although the researcher’s reflective style sometimes keeps her from participating boldly and effectively in class discussions and causes her to reflect too much after participation, this style also enables her to reflect on her learning constantly and seek the best approach towards learning. Therefore, the reflective style has its advantages, as the following diary entry shows.

Reflection: I realize that I better make my own thoughts clear before speaking up. It also helps to keep notes of key concepts handy… Also, even if I cannot finish my own sentence, it is ok, because it might still be useful. Someone else can pick up my
thought and continue with it. Therefore as long as I do not dominate the conversation, it is better to contribute immature thoughts than saying nothing at all. (February 11)

Surely the researcher’s reflective learning style is also her strength (Kolb, 1984), which is to think often and deeply about her learning process. The ability to use metacognitive reflection to enhance learning is related to her reflective learning style. Metacognitive reflection helps keep the learner on the right track and remember the big picture. For example, in the following excerpt, upon reflection the researcher realizes that she should not join in discussions just for the sake of joining; she should try to contribute something valuable instead of just wanting to be heard.

Also I shared something about an article with the topic of educational reforms in China. I spoke simply because I thought it was about China so I better share something. However, I did not know what I was talking about really.

The lesson is: how to balance the quantity and quality of speaking in class? I should not talk just for the sake of talking. I must respect other people's time. At the same time, if I sense that I have something valuable to contribute, I should not hesitate or be afraid of what others are going to think. This is the general principle: contribute what I think is valuable to contribute. (metacognitive: decide my principle of speaking in class). (April 21)

It is noticeable that although the researcher’s main learning style is reflective, she did have some moments in which she listened to her intuitive pulse or spontaneity. During those moments, she would actually speak up without much of her usual pre-thoughts of self-checking, and she celebrated the results. Notice how much joy and satisfaction a spontaneous, intuition-based experience offers to the researcher, at least until self-doubt again sets in:

A miracle happened! When the class was almost over, and I felt very tired. I suddenly heard the professor ask a question. Somehow I felt the answer was there in my mind, so I raised my hand and talked very clearly and confidently. It was like dreaming to me, because I did all those without much thinking, as if my hand automatically raised and I just talked as if in my own living room. I was not nervous at all. Then after I spoke, the usual self-doubt settled in and I began to understand what I did and wondered what I talked was worthwhile or not or whether I said something stupid...Until after class, a classmate told me: “What you said in class helped me learn.” I realized that I should not hesitate to contribute if I believe it is a good idea, because somebody else might benefit. That is the essence of cooperative learning. I should have more confidence in myself.

Affective strategy: have confidence in yourself. If you think an idea is good, say it. (February 17)

This anecdote indicates that for reflective learners, it could be beneficial at times for them to release the self-constraint that is often associated with a reflective personality. It would be beneficial for the learners to observe under what circumstances and which factors will cause them to reflect less and to take action, which is to speak up without much hesitation. Oftentimes, when a student thinks and hesitates too much, chance after chance of jumping into a lively classroom discussion will be gone and the silent student will feel frustrated and disappointed at herself or himself for not sharing anything. Besides a reflective learning style, a student’s lack of confidence in his or her language abilities and perfectionism in the form of striving to contribute valuable ideas can play a role here, as the above excerpts indicate. From a pedagogical point of view, an instructor can use teaching strategies or activities to help the reflective student become more relaxed and more spontaneous. Reflection is a two-edged sword, helping the student focus on high standards and make his or her contributions worthwhile; reflection needs to be done, but it also engenders self-doubt. Trusting spontaneous intuition helps the student break free from the constraints of reflection and builds up his or her confidence.

The diary seems to confirm Ehrman’s (2008) findings that intuition is important for high-achieving learners. However, the ability of intuitive people to make associations between things in their minds also prompts the researcher to wander off in her own thoughts and lose track of the class. The following excerpt is a typical example:

I have noticed that during the class, my mind wandered off a few times. I had to bring myself back to track. Strategy: I had to decide what distracted me.

I realize that the most common thing is that I hear a word or a sentence and immediately associate it with something else in my mind, and then that something will automatically associate with something else, so my mind goes far and far away from the class until I suddenly realized that I was off track. (February 25)

Metacognitive strategies should be especially useful in preventing this type of wandering off, because they remind the learner to constantly check one’s concentration.

5.1.2. Introverted style

As noted, the researcher also has an introverted learning style. This tendency towards introversion is revealed in her intensive focus on and sensitivity towards her inner feelings and perceptions, which are recorded in the diary. Ehrman (2008) describes introverts as those who “focus more on their inner worlds of internal experiences, including concepts and feelings,” while extroverts “tend to focus on the outer world of things and people” (p. 62).

In the following entry about a positive pair work experience, the researcher with an introverted style emphasizes her feelings of being heard and being able to contribute fairly to the project. It seems that this internal feeling is very important to her overall assessment of the whole cooperative learning process:

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Then Sandy asked us to work in pairs. Julie who sat beside me said to me: “would you like to pair?” I said: “yes!” Julie took the leadership role and started to write on the poster. I gave her suggestions and she accepted them. We cooperated very well, in my opinion, because both of us had our ideas materialized on the poster. We negotiated our ideas about how to create the poster. That is the ideal of cooperation for me. I really think in cooperation, no single side should dominate. (February 11)

The above excerpt shows that as an introvert, the researcher actually enjoys teamwork when she feels that all the participants contribute to the work, when ideas are negotiated without one person dominating the group, and when she does not feel silenced. Feeling silenced and unappreciated in group or pair work has been a concern for international graduate students. Research has revealed that due to limited language abilities, a foreign accent, and/or other factors, non-native English-speaking graduate students often speak little or become passive participants in group learning activities in North American higher-education classrooms (Xue, 2013). In the classroom, they feel defeated, ignored, and not respected (Erichsen & Bolliger, 2011). Their native-speaker partners in group projects might not deliberately try to silence or ignore them. However, in many cases the non-native graduate students’ broken sentences, slow speed of speaking, and shy attitude make it hard for them to get people’s attention. Therefore they become passive onlookers, and the native speakers take over. For an introverted person such as the researcher, the feeling of being ignored is very unpleasant. Thus the feeling of being heard, as exemplified in the above excerpt, became memorable. From a pedagogical point of view, it is recommended for instructors to emphasize to the class that everybody’s voice should be heard and respected in a group project setting. He or she can also help the whole class see the non-native speakers in the class as students who have strengths instead of weaknesses, because they are bilinguals and they are brave enough to study subjects in a foreign/second language and culture. The instructor’s conscious efforts in preparing the class for a right attitude towards other group members, especially towards those who may be perceived as “the other,” are crucial here to ensure an inclusive learning environment.

Internal self-checks can also cause a reflective and introverted learner to refrain from speaking up even if intuitively he or she knows the right answer. In the following excerpt, the introverted style keeps the researcher focusing on her own inner feelings and thoughts, and the reflective tendency causes her to second-guess and criticize herself, although her intuition encourages her to trust herself and speak out:

Then during group talk, we were supposed to think about how an author critiqued hypothesis testing. Intuitively I somehow knew the answer, but because the professor was at our table and also because hypothesis testing is not something I am familiar with, I did not venture to talk, until the professor said what I wanted to say. I realize that I should be more open, more frank in group discussions (March 24).

Trusting her own intuition and learning to be more open in group discussions are aims of the researcher throughout the study. Ehrman (2008) points out that a combination of intuition and thinking (reflection) makes a language learner a strategic and relentless learner, who will favor the use of metacognitive strategies, such as goal-setting, self-assessment, and self-monitoring. (The researcher’s frequent use of metacognitive strategies is illustrated later in this article and was adumbrated by the strategy survey taken before the diary study.)

Ehrman (2008) therefore suggests language learners who combine intuition and reflection have an extra advantage. However, the present diary study also points out a conundrum: the constant, pricking conflict between intuition and reflective thinking. Intuition encourages a learner to be bold and open in discussions, while thinking (reflection) sometimes pulls the learner back with self-doubt.

Additionally, introversion has a tendency to dampen some communication opportunities. However, Ehrman (2008) proposes that the combination of intuition, thinking, and introversion can be valuable to language learners. The diary seems to prove this point in the realm of learning spoken English — but in a uniquely complex way. Although as an introverted and reflective learner, the researcher might hesitate to join in the class conversation, her intuitive side inspires her to speak out. Then, when self-doubt from over-reflection discourages her, she uses her reflective abilities in a different way, strategically assessing the situation and urging herself to be more open and flexible and to contribute.

5.1.3. Metaphorical style

Another component of the researcher’s learning style is a tendency to learn well through metaphors, which may be traced to her background in English literature. (For more on metaphors, see the article entitled “Experts’ Personal Metaphors and Similes about Language Learning Strategies” in this special issue.) This metaphorical style is related to intuition, which according to Ehrman (2008) makes the learner “prone to make associations almost as a second nature” (p. 66). Notice how the researcher was excited by a metaphor and eager to share it without hesitation in the following excerpt:

Then Sandy asked again: “What is active learning?” A student said: “I feel one hundred people have one hundred answers about that.” People murmured in agreement. I at first felt that I could not say anything meaningful about this. But suddenly I had an idea and I felt inspired to say it. So I said: “I have a metaphor for active learning. I think it is like processed food. Students take in raw materials (knowledge), and they have to cook it, process it, and then it is no longer raw materials…” Professor Hans said: “Oh, I really like your metaphor.” I felt very proud of myself because I not only said an innovative idea but also had the courage to share it. (February 11)

Although the researcher is an introverted and reflective learner, who often feels inhibited about classroom discussions, her metaphorical learning style motivates her to share an original metaphor or an innovative idea more freely, because she is...
naturally energized by and attracted to metaphors. Implications for teachers of introverted learners could be that the teachers can give introverts opportunities to share something that will motivate and energize them, something that will pull them out of their shell. This can be a picture, a tune, a poem, or a metaphor.

However, the researcher’s “metaphorical” side does not always propel her to speak out in class. In the following excerpt, reflective self-doubt again keeps her back, even when she has a metaphorical idea to share. Therefore, whether the researcher will join in the classroom discussion as she intends to do sometimes depends on the combined effects of different aspects of her learning style.

At a time I had a good idea about “postmodernism”. I thought about Hemingway who talked about the “lost generation”. Does that relate to “postmodernism”? I wanted to ask but I was afraid that people think me as showing off my knowledge. (February 24)

The researcher’s metaphorical learning style is also evident in the fact that she pays much attention to metaphorical language, or what she calls “fresh and interesting expressions,” spoken in those two courses and keeps many examples in the diary:

One classmate used very funny expressions: we have TAs [teaching assistants] like eager beavers and we also have TAs taking the back seat. (April 9)

Again, I noticed that I tend to focus on innovative ways of using the language. The teacher said: “look like a deer in the headlight”, which sounded very interesting to me. I was savoring the beauty of the expression and did not notice what he said next. Strategy: Focus on the big picture instead of certain words or expressions. (February 24)

As hinted in the February 24 excerpt immediately above, as well as in the following diary entry, it is interesting that a metaphorical style has the disadvantage of occasionally distracting the researcher from the class discussions.

I realize that I tend to focus on how the teacher and classmats use certain words or expressions, and cannot focus on the meaning of the message sometimes. This class has a lot philosophical content and therefore is quite difficult. If I don’t focus, I can’t understand what the speaker tries to say. Strategy: focus on the whole picture. (February 24)

The learner’s reflective style plays a role in helping her recognize the occasional disadvantage of her metaphorical style. Goh (1998) mentions that poor listeners will be distracted by their preoccupation with difficult words or ideas, but the researcher in the present diary study is distracted by interesting and lively words and expressions due to her metaphorical learning style.

5.1.4. Environmental effects on learning style

The researcher is very sensitive to aspects of her learning environment, such as noise, light, and people sitting close to her. The Dunn and Dunn (1993) model of learning style has five strands, one of which is individual’s response to sound, light, temperature, and seating design in the immediate environment. To the researcher, those elements can affect her emotional state in the classroom. The following excerpts show that seating is very important for the researcher.

Now my group sat in the back of the classroom. I found it a disadvantage, because it was easy to be distracted, harder to concentrate, also I felt much less confident to ask questions or participate in whole-class discussion… (March 10).

The researcher is also very sensitive to the light and noise. In the following excerpt, she communicated much better with her American group members because they were in a different room which was bright and quiet:

Today before class our group met to prepare for our project. It was a brightly lit small of ce, and is quiet and I arrived early when just one classmate was there. I realized that those three things have good effects for me: the light, quietness, getting ready beforehand, since I felt much more confident talking this time than when I was in class. In class usually during group discussions, it was very noisy and I had to compete with background noise and I had a small voice when I was anxious. (April 7)

On more than one occasion, the researcher wrote about how her professor’s sitting at her group’s table intimidated her, and as a result she did not contribute to the conversation. The researcher is very sensitive about people around her:

Because our group again sat in the back of the classroom and also because the professor sat at our table, I felt even more anxious about speaking up and saying anything. I actually knew something about today’s topic—grounded theory, because I learnt about the topic in another class, however, I did not say anything. (March 31).

The above excerpts are practically useful to non-native students, as they should know that they can consciously and deliberately choose where to sit and near whom to sit before the class starts. It is also beneficial if they are constantly aware of the effects of environment on their performance in a class discussion.

5.1.5. Cultural influences on learning style

In the learning diary, the researcher observes that the style of speaking up in class is influenced by cultural differences:

I also observe that American students can hesitate and hold the floor by space-fillers. In my culture, students don’t do that because we feel it will waste the whole class’s time. Therefore, we tried not to hesitate. …I realize this cultural difference: Americans emphasize sharing one’s idea, no matter how immature it is. They think first everybody must speak out whatever the idea is on his/her mind, then throw it out there and let people discuss it and the idea will finally evolve. In my culture,
people, especially students, think hard before talking to make sure that this is his/her best idea. I saw in American group discussions, people were very busy exchanging trivial things and ideas that everybody knows already; I also see that in Chinese classes, nobody talks for a long time. Maybe the middle way is the best. (March 31)

In the above, the researcher comments on the Western and Eastern cultural difference in speaking up in class. The Eastern culture (her own culture) prefers to think matters through before speaking, which matches her reflective learning style. The American culture encourages contributing ideas, even immature ideas, so that the group discussion can move on. The Eastern culture cares about not wasting everybody's time; the Western culture cares about moving the discussion forward. Perhaps there is a compromise, as suggested by the researcher. This suggestion might be useful for teachers to encourage discussions and at the same time to control quality.

5.1.6. Summary of learning style results

Based on the diary results, the researcher mainly has a reflective, introverted, and metaphorical learning style, which interacts with other elements of her learning, such as intuition, environmental effects, and cultural differences. Since each component of overall learning style has its own advantages and disadvantages, the learner should be aware of and manage them in order to achieve the learning goal. The discussion also suggests that there is no learning style superior to another, because one single learning style can have both positive and negative effects on one's learning. It is important for a learner to accept his or her learning style profile, gain a thorough understanding of it, and coordinate its different components so that the learning goal can be achieved. For example, in the researcher's case, she should check her over-reflection and oversensitivity to her inner feelings and thoughts, so that she can sometimes join the discussion boldly and intuitively. Also, her reflective style should help her keep in track whenever she is distracted by innovative expressions or words due to her metaphorical style.

5.2. Results concerning the researcher's learning strategies in the two courses

In both academic courses that the researcher took, class discussions were strongly encouraged, and the ordinary teaching method is lecturing and discussion (in the 3-credit-hour course) or mainly discussion (in the 1-credit-hour course). In the more demanding course, the researcher was put into a group of five students for the whole semester to hold frequent discussions and do group presentations. In the 1-credit course, discussion was the dominant teaching method, with the teacher as the facilitator and the students sitting in a circle.

Both course structures call for the researcher and her classmates to learn by listening and speaking. However, the researcher's preferred style is introverted and reflective, so she is not necessarily comfortable talking in front of people whom she does not know well, and she tends to think carefully before jumping into a discussion. Also, with a visual modality preference, the researcher prefers to learn by images, not by sound. Therefore, the researcher's visual preference partially puts her at a disadvantage when she tries to learn by listening and speaking in those two classes.

5.2.1. Metacognitive strategies and social-interactional strategies

As explained earlier, the researcher likes metacognitive strategies such as planning, organizing, monitoring, and evaluating her learning. This strategy usage fits with her reflective and introverted preferences. As Ehrman et al. (2003) note, learning styles influence strategy use. For instance, investigators report that introverts, especially those who are also reflective learners, use metacognitive strategies extensively, as well as employing the cognitive strategy of mentally processing and rehearsing before speaking, while avoiding risk-taking strategies in conversations and avoiding most social strategies. This combination of strategy use obviously has its advantages and disadvantages when the goal is to improve one's communication in academic classes.

It is also interesting that the researcher uses both metacognitive and affective strategies to help herself overcome a personal issue, and regain perspective and motivation to concentrate and learn. During the period of the diary, the researcher is once so troubled by her housing situation that she has difficulty concentrating in class. The following excerpt reveals metacognitive and affective tactics, such as motivational self-management, refocusing, and finding a new perspective, that she uses to cope with the inner stress. The diary states:

1) Think of bigger picture. Think of future.

I must remind myself that the present difficulties will pass and I should not be absorbed into it and lose my perspective of the big picture. A person must focus on things that are really important.

2) Prioritize. Prioritize.

As a student, learning is my first priority. I should not care too much about other things. I should minimize their effects as much as possible.

3) Read good encouraging books or remind myself of my heroes

I remember once I read a remarkable book about George Washington 1776. I remember how often he felt so discouraged, so stressed out because of the severe conditions of the war. However, he never lost his perspective and the strong faith that he has a mission and he has a goal to accomplish. …
Based on the above thinking, roommate problem becomes very small, no longer so annoying. (March 10)

As an introvert, the researcher tends to cope with stress by dealing with herself, not with other people in the environment, as preferred by extroverts (Ehrman et al., 2003). She mainly tries to reorganize and reframe her thoughts to see the situation more positively. It might be beneficial in the above situation if she would deliberately try some strategies typically used by extroverted people, such as becoming more vocally involved in the classroom discussions, and talking with friends after class, etc.

In the following excerpts, the researcher makes the conscious, metacognitive decision not only to use learning strategies that are compatible with her reflective, introverted learning style but also try out new strategies, which are dramatically less comfortable but which help her to take risks in conversation and participate more freely. She also decides to employ her intuition more often as a means of overcoming inhibition. On the following occasion, the researcher ventures far out of her comfort zone and reaches out to others in order to cope with her inner stress. This is atypical of an introverted and reflective person. She uses social-interactive strategies to help herself refocus and calm down.

Today, again because of the roommate situation, I was kind of stressed out at the beginning of the class. It was somewhat hard for me to concentrate. I forced myself to actively participate. That really helps. I volunteered to talk about the “strategypedia” we did in another class before. I am so glad that I shared this with class. (March 12)

The researcher concludes this diary episode by telling herself that she should reach out and get more involved when stressed inside. She coaches herself to adopt a somewhat more extroverted style.

When stressed out or worried about other things, I should make extra effort to get involved in class, which will help me concentrate and forget my worries. (March 12)

In the following excerpt, the researcher tries new social-interactional strategies, such as exchanging small talk, to help her get to know her group members; those strategies are not typical of an introverted learning style.

I exchanged greetings with fellow students sitting on my table. We were assigned to sit at this table for three weeks now. At first I was afraid to talk to them. Now I have started to feel warmed up towards them and talked more confidently among them during group discussions. I realize that as an introverted person, familiarity level with people I talk to is very important to me. Therefore, my strategy would be to start small talk with classmates as much as possible or just say “hello” or smile, because that will help me discuss with them in class.

Another social-interactional strategy used by the researcher is seeking help from someone more capable. The researcher aggressively seeks help from people more capable than she is, including utilizing the professor’s office hours. This tactic is not preferred by introverts due to the stress of interacting with people, especially with authorities. Considering the researcher’s own Asian learning background, it is even more daunting. However, the researcher pushes herself to go, and it turns out to be a positive experience:

Today before class, I went to professor’s office time and asked several questions, which is very helpful. I realize that it is beneficial for me to go to professor’s office time. Strategy: go to professor’s office time. (March 24)

On a different day, the researcher seeks help from someone else before her class presentation:

Before the presentation, I also talked with my conversation partner about the topic. She is taking a class very much related to my topic. I have got a lot information from her. (tactic: talk with a friend before presentation). (April 28)

In the following excerpt, the researcher tries to learn from someone who seems bolder and more confident in public speaking. For the class session, she literally changes her own introverted style by adopting two behaviors typical of the other person, who is more extroverted:

I volunteered to present about class technology today. The first presenter was very good at talking in public. I observed her and learnt two things: 1. she maintained eye contact with people; 2. she asked questions to check audience understanding from time to time. Therefore when it was my turn and I instinctively wanted to hide behind the computer, I controlled myself and stepped out a little bit so that my audience could see me better. I also asked them a question to check their understanding during the time. I realize that both things I did are out of character. This proves Vygotsky’s theory of social learning. I learnt from someone who is better at public speaking than me. Strategy: modeling. (April 24)

The strategy of seeking help from more capable people reflects Vygotsky’s (1978) “zone of proximal development” model. This model explains that learners can learn through contacts or collaboration with a more skilled person in a supportive sociocultural context (see also Smagorinsky, 2007).
5.2. Cognitive strategies

The researcher is a visual learner, so throughout the whole semester, she consistently uses the strategy of taking notes. In order to keep herself on track with the lecture, she writes down only key words or concepts as reminders of the content. This strategy is frequently recorded in the diary. Note-taking is a cognitive strategy preferred by visual learners, who learn better when they see the words written down. Also, the diary mentions that the researcher typically looks at the speaker and tries to sit close to the speaker in order to listen better, reflecting her visual style.

5.2.3. Affective strategies

The researcher consciously adopts affective strategies to ensure a positive emotional state for learning. The following is one example:

When my classmates started to present, and the room became dim because they turned off the light, I suddenly felt very sad. I think the feeling and smell of a spring evening made me very homesick. I suddenly felt very far away from what was going on in the classroom and was overwhelmed by this melancholy feeling. Right there, I remembered how I always cherish an opportunity of learning and here I can have this two hours of learning. I cannot just let it slip by without trying to learn. I literally pulled myself out of this feeling, and pushed myself to concentrate on what was going on. I am very happy that I did that because I realize that at that moment, getting involved into the class and trying to think and to actively learn is the best thing I could do.

Strategy: positive self-talk, keep cool and calm and objective when feeling blue, keep focused on the task at hand, cherish learning opportunities. (March 24)

In the above excerpt, the researcher uses positive self-talk, an affective tactic (Oxford, 2011) to pull herself out of homesickness and melancholy. This example again reflects the effects of classroom environment on the researcher as a learner. Notice that the researcher mainly uses motivational self-talk to help herself out. As mentioned before, the researcher can also try affective strategies that are normally used by extroverts such as raising a hand to ask a question or getting out of the room to seek a drink of water in order to calm herself down by changing her outside environment rather than dealing inwardly.

6. Conclusions

First, learning diaries are very useful for identifying an individual’s learning styles (Carson & Longhini, 2002), perhaps even more useful than taking a learning style questionnaire, because diaries provide insightful details. Second, every element of a person’s learning style profile — reflective, introverted, metaphoric, visual, and environmentally sensitive in the case of the researcher — can have advantages and disadvantages. Therefore, it is important for the learner to metacognitively manage the effects of them and try to reach a state of balance most possibly conductive to learning. This confirms the importance of metacognitive thinking and planning on the part of the learner. It is also important for the learner to effectively manage the interactional effects of those styles and to be more flexible in order to achieve a learning goal.

Reid (1997) points out that students should be adaptable, since research shows that “the ability of students to employ multiple learning styles results in greater classroom success” (p. 101). Chapelle and Roberts (1986) assert that good language learners can be flexible and adapt their learning style to fit a learning task or purpose, while poor language learners rigidly refuse to change their learning styles, no matter what the task or purpose is. To accomplish the listening and speaking tasks in academic English, the researcher in this diary study employs learning strategies, some of which are compatible with her original learning styles and some of which feel incompatible. For example, she uses the very comfortable cognitive tactic of taking notes to help herself, as a visual learner, in a mainly auditory learning context. She employs the stylistically uncomfortable tactics of going to the professor’s office to talk and asking a friend to help her before a presentation. Both are ordinarily outside of her introverted learning style, but she uses these tactics to fulfill her communicative goals, break the bonds of reticence that normally bind her, and stretch her learning style. She actively pushes herself to become more interactive, more extroverted, and more spontaneous. Newly trusting her intuition emboldens her and keeps her from thinking too much and hesitating before speaking out.

7. Instructional implications

Nel (2008) explains that “the key for teachers in planning instruction is to be aware of the multiple ways students learn best” (p. 54). Finding out students’ preferred learning styles and helping students become aware of them is a first step. The teacher should assure students that there are no better or worse learning styles. All learning styles build on students’ learning strengths and can be potentially helpful. With the teacher’s help and guidance, each student can learn to understand the potential advantages and disadvantages of the varied components of his or her learning style profile, as well as the combined effects of these components. Teachers can encourage students to manage their learning styles to make the combined effects as positive as possible. Then the teacher can help students to explore the interactions between their learning strategies and learning styles.

Please cite this article in press as: Ma, R., & Oxford, R. L., A diary study focusing on listening and speaking: The evolving interaction of learning styles and learning strategies in a motivated, advanced ESL learner, System (2014), http://dx.doi.org/10.1016/j.system.2013.12.010
Students need to learn first to identify the learning strategies that are compatible with their learning styles. If those strategies are useful for their learning goals, students should continue to use them as first choices. However, in many circumstances, learning goals demand that students consider using strategies that are not necessarily compatible with their natural learning styles and that therefore cause a bit of initial discomfort, such as going to the professor’s office to chat when they are ordinarily dyed-in-the-wool introverts. If those less compatible strategies are useful for the learning goal, students need to “stretch” their learning styles to use them. Ehrman et al. (2003) note that “It is best to begin something new and possibly difficult using one’s preferred learning styles. After a bit of a firm base is achieved, it is appropriate to encourage the use of less preferred styles and the associated strategies” (p. 319). Students might discover that at the end of one learning cycle, such as a semester, their learning styles have gone through certain mild changes and become an adapted combination of learning styles. Students need to stay open and flexible and also try to keep their combination of learning styles balanced and suited to the learning goals. Therefore, Fig. 1 proposes a model of language learning based on the interactions between learning styles and strategies. As the model shows, metacognition (the mastermind behind a learning process) always plays a central role in advancing adult language development beyond the rudimentary level.

Fig. 1. Learning styles and strategies in the process of L2 learning.

An additional instructional implication is that teachers can pair one student with another student who has a different learning style, so that learners can emulate the desirable strategies of the other person and incorporate them into their own styles. This might take some help on the part of the teacher. In addition, teachers should try to address all learning styles in the class by intentionally varying the types of instructional activities used. Teachers should intentionally use multiple instructional approaches, rather than just using the approach that is the most stylistically comfortable to themselves as instructors. Teachers should also be aware that their teaching styles interact with the students’ learning styles and might help create smooth, rapid learning or, on the other hand, cause resistance in individual learners. An instructional aim for teachers is to help learners optimize their strategy use (Chamot, 2004) while reducing learner resistance and enhancing motivation and engagement, so that learning can be fruitful.

References


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