

Student Learning Styles: What the teacher should know

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One area which has been under intensive investigation by educational researchers during the last twenty-five years is learning styles. Linguistic investigators have focused their attention on isolating specific traits and cognitive processes which would aid or impede the progress of a second language learner. Even though most of this research has been done with native English-speaking students learning within their own country and culture, several factors have been identified that seem to better categorize the student learning differences that we as EFL teachers in Mexico have noticed but not realized how to use to our advantage. The purpose of this paper is to review the most common cognitive learning styles that are of interest to EFL teachers and to offer some suggestions as to how we may use this information to the benefit of our students.

Review of the literature

Learning styles can be defined as "cognitive, affective, and physiological traits that are relatively stable indicators of how learners perceive, interact with, and respond to the learning environment" (Keefe 1979: 4). The term *style* is used to describe a manner of learning which is determined from birth to early childhood and, although it may be consciously modified, cannot be significantly altered throughout a person's life; it is an inherent characteristic which perseveres even though the learning situation may change.

The study of *style* includes information processing in the brain and how this processing is affected by each person's perceptual differences. Research conducted with children in the U.S. (Reinert 1976, Dunn 1984) has shown that there are basically four perceptual learning modes: visual, auditory, kinesthetic and tactile. Visual learners prefer to learn by reading or studying graphs, diagrams and charts. Auditory learning involves hearing tapes or listening to lectures while kinesthetic learners prefer a physical involvement using body movement during the learning experience. The students who prefer tactile learning are those who want to build a model or conduct a laboratory experiment in order to facilitate their learning.

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Investigations into the differences in learning styles between industrialized and non-industrialized cultures have shown that their response to visual images are different (Reid 1987: 87). Also, bilingual researchers have found that children from various ethnic groups process cognitive information quite differently. This particular area should be of interest to EFL teachers since their students generally are using texts and materials produced by native English speakers in the native country and culture, using the cognitive processing styles most common in that country, which may not be the most culturally adequate for EFL students and their *styles*.

Joy Reid (1987: 96) conducted a study analyzing 1,234 university students from nine different language backgrounds, including English. The purpose of the study was to identify differences in learning style preferences according to variables such as language background (culture), major field of study, ages, sex, TOEFL scores, etc. The study indicated that the Spanish language group chose more visual and tactile learning than did the native English-speaking students. Also, the Spanish group preferred kinesthetic learning much more than did the native speakers of English, whereas the English-speaking students preferred auditory learning slightly more than did the Spanish speakers. The English group was more prone to individual learning situations, but both groups scored group learning negatively with only a small difference between their ratings.

Studies concerning perception and Gestalt psychology have resulted in one of the most researched areas of cognitive learning styles, field dependent (FD) and field independent (FI) learners (Ehrman and Oxford 1990: 311). In literature, field dependent and field independent qualities are seen as affecting patterns of learning, thinking and social interaction, which is why they are important factors for educators to consider. These terms are used to describe how a person tends to perceive, organize and analyze information and experiences.

Witkins and Goodenough (1977: 661) proposed that FD persons orient themselves to others easily which produces greater interpersonal and social skills. They are more sensitive to social cues and more outgoing and emotionally open than are FI persons. Field independents, however, have more defined boundaries between outer and inner selves. They possess a greater autonomy from others when performing tasks and in social situations. For these reasons, an FI person is seen as being aloof and less sensitive to others which effects their capability in interpersonal situations.

This information is interesting for linguists to research and discuss, but how do the FD and FI factors effect student performance differences? During the 1970's and 80s,

many studies were conducted in order to distinguish any differences that may exist between FD/I in second language performance. Naiman et al. (1978) found that FD and FI learners seemed to process information and produce linguistic patterns differently. They also found that FIs performed better on imitation and listening comprehension tasks and, in general, had higher scores on achievement tests for language skills. The field independent factor is advantageous for students for analytical tasks, but not necessarily for all aspects of language.

Hansen and Stansfield (1981: 363) found in their study that FI learners received higher scores on discrete point tests used for their language exams. This is possibly due to their ability to analyze, organize and structure the input, as well as successfully monitoring their output. Nonetheless, FD language learners had their best performance in the areas which involved communicative competence in the foreign language. They explained that "the well-developed social skill and personal characteristic of outgoingness and warmth which are associated with field dependence possibly allow such individuals to communicate with ease and use the new language appropriately for social and communicative purposes."

A subsequent study by Hansen and Stansfield (1982) investigated FD/I college foreign language achievement in three kinds of proficiency: communicative, linguistic and integrative. In this study the instructors were also categorized as being field dependents or independents. The FI learners consistently reached higher achievement levels even when taught by an instructor whose cognitive style was different (i.e., field dependent). This would seem to indicate that the teacher style has little or no negative influence on student learning. An interesting finding in this study was that the group of FI females repeatedly obtained the highest levels in all three proficiency areas while the FD males consistently scored the lowest. However, these results have not been confirmed conclusively in other similar studies.

Jungian psychology research in the area of conscious functioning has identified other related cognitive learning styles. Below you will find a brief explanation of the four most common contrasting pairs as identified by Ehrman and Oxford (1990: 318-322) using the MBTI (Myers-Briggs Type Indicator) and the SILL (Strategy Inventory for Language Learning) as instruments.

1. Extroversion/Introversion

Extroverts reported using indirect strategies (especially social) in a learning situation and some metacognitive strategies to organize their learning and to enable them to concentrate for long periods of time. They preferred to work with their peers and

searched for speakers of the target language with which to practice. *Extroverts* found it difficult to study alone. They always need to be active socially and physically.

Introverts learn best alone with little peer contact. This group preferred reading and writing to speaking and listening. They wanted to know what came next in a lesson and did not like surprises in their learning situation. They are not risk-takers for fear of making mistakes and process new material mentally before using it orally in the classroom.

2. Sensing/Intuition

Sensing students like best to memorize material and reported using concrete and often multisensory (imagery, drawing, etc.) strategies. They worked systematically towards their goals using small sequenced structured portions. They tend to feel frustrated when they do not have a step-by-step, linear progression in their course work. They wanted a course with clearly defined curricular goals presented in a sequential order. *Sensors* prefer practical topics that have immediate application in their lives and have a low tolerance of ambiguity. They are not risk-takers.

Other students prefer intuition. *Intuitives* are holistic learners who mainly use global processing in their learning. They are comfortable with experimentation and risk-taking in the foreign language. Some reported that language learning is unconscious while others found it necessary to use cognitive strategies such as analysis and reasoning to provide structure to their learning. They prefer to learn independently and need a variety of teaching approaches and methodologies. *Intuitives* have imagination and creativity and enjoy the freedom of making choices from various possibilities.

3. Thinking/Feeling

Students characterized as *thinkers* are the most apt to use cognitive strategies and to employ analysis and reason in their learning experience. They prefer analytically structured materials and reject social interaction. Tasks and materials must be oriented to their own objectives and needs for the language. These *thinkers* reported having problems with a loss of self-identity and overly high expectations for themselves. They were the most socially detached of all the types in the study. *Thinking* learners reported needing books more than other people and were generally insensitive to the needs of others.

Feelers reported using the fewest cognitive strategies of all the groups and were most interested in tasks and topics not directly related to their final goal to use the

language. As opposed to the *thinkers*, they were very socially oriented; they liberally gave and liked to receive praise. The *feelers* were not bothered by doubts of their social acceptability which may be the reason why much of their energy was applied to learning the language instead of protecting their self-image.

4. *Judging/Perceiving*

Among the strategies that the *judgers* reported as using were systematic organization and planning. They preferred a prestructured syllabus stating clearly the goals and objectives. They had a strong need to achieve their objectives and expressed a desire to be "in control" of the material and their environment. *Judgers* showed difficulties in inferring meaning from texts and did not like communicative activities which were seen as "games" not to be taken seriously. They were more inflexible and reluctant to take risks than other types.

The *perceivers* approached the process of language learning through a variety of cognitive strategies, such as analyzing, recombining and skimming and compensation strategies, such as guessing and improvising. They tended not to structure, plan or organize their learning, disliked routine and worked in bursts of activities instead of steadily.

Suggestions for teachers

As professional teachers, reading about different learner styles can be interesting, however, as EFL teachers in Mexico we normally do not have enough expertise in psycholinguistics nor do we have the time to design the proper instruments, apply them and interpret the result to diagnose our students' learning styles. Even if we did, how could we allow for the individual learning styles of each of our students when our normal teaching load could include between 100-180 different pupils per day? These are the comments commonly made by teachers when the topic of learning styles arises in group discussions or following conference presentations concerning *styles*. Teachers usually feel it is their job to teach English using their preferred methodology and materials and it is the student's responsibility to learn, no matter what learning style he has. The student must adjust to the teacher, not the teacher to each student.

These comments are almost understandable considering the tremendous teaching load for the salary that most teachers earn. Nonetheless, an attempt to understand student styles can result in a more enjoyable class, for students as well as the teacher, and more efficient learning. We often forget that students are not always the same and

that some respond better with one approach than with others. For this reason teachers must use flexible instructional methods and learning environments in order to reach more students. All students can learn; however, some have learning styles that if the teacher recognizes and uses approaches which are more compatible for that style, then the student is more apt to succeed. It is the purpose of this section to provide ideas of how this may be accomplished.

Secondary school research has shown that "approximately 90% of traditional classroom instruction is geared to the auditory learner. Teachers talk to their students, ask questions, and discuss facts. However...only 20% to 30% of any large group could remember 75% of what was presented through discussion." (Hodges: 28) One answer to this problem (which is not a viable one in Mexico at this time) would be to match teachers' and learners' styles in order to ensure that the styles are compatible. A more realistic idea may be for the teacher to attempt to be aware of the different individual styles present in the classroom and then to use flexible approaches to enable most (if not all) learners to succeed. If teachers can identify that the majority of their students responds best to visual and kinesthetic learning, then the majority of the presentations of language points and tasks to practice them can be planned using those styles. If most of the learners prefer working individually, as opposed to in groups, then appropriate activities can be designed.

One activity which this teacher has used successfully in the EFL classroom is to initiate group discussion about learning styles as an assessment technique to enable the students to identify their own style. For most of our students, the idea of a learning style preference is new. As a communicative class activity, begin with general questions that they can answer about all of their classroom learning experiences. For example:

- Do you understand better when you hear instructions or when you read them?
- Do you remember better when you study alone or with friends?
- Do you learn better in class when the teacher lectures or when you do an experiment?
- Do you prefer to work by yourself on a project or in a group?
- Do you learn best in class when you can participate physically in a learning activity or by taking notes?

After the students have considered their answers try some of the following activities: Have students tell you the purpose of the questions; discuss their answers and allow this to lead into an open forum concerning how each student learns best; put them into groups according to similar styles for further investigation in the library; have them discuss and decide about the different styles that their teachers use and design questionnaires to be given to other students at the school. The purpose of these

activities is to help students increase their awareness of learning differences and identify and assess the effectiveness of their own individual style in the hope that they can, as mentioned previously, modify their particular style(s) to better adjust to different learning situations.

Related to the study of perception and the Gestalt theory of field-dependence/independence are the psychological-type learning-styles from Jung's model of conscious functioning and learning styles. Psychologists have found that an individual can have more than one learning style. For example, a person is not entirely *intuitive*, but is dominant in that style with some characteristics of another (i.e., an *intuitive perceiver*). The following is a list of the contrasting pairs identified, now however, with a brief summary of suggestions for curriculum, materials and activity preferences for each type.

Extrovert/Introvert

The *extroverts* need for constant variety in activities, risk-taking, social stimulation and interaction is an important classroom consideration. Their need for verbal and physical activity is obviously compatible with using TPR (Total Physical Response). Chunking homework into modules of 30 minutes will allow the learner time to take a break from the concentration that they find difficult to maintain.

Introverts need strictly sequenced activities which will allow them to work alone: programmed learning is their preferred choice. Since they do not like to take risks, do not expect them to role-play or any other activity which would involve extemporization. They need time to prepare or otherwise process information before speaking. The classroom should be as relaxed as possible since their affective filter is always up.

Sensing/Intuition

Sensing learners need their goals and objectives clear and presented in sequential order. The materials and activities used should allow for kinesthetic and multisensory input for optimum effectiveness. They will need extra help with inferencing, with distinguishing main ideas from minor details and with structuring their total learning experiences.

Intuitive learners acquire the language better with the Natural Approach and are very comfortable with Krashen's Comprehensible Input Theory (1+1). They enjoy challenges (risk-takers), need variety in the class, and deal well with self-access materials where the teacher becomes a resource person to provide occasional guidance when necessary.

Thinking/Feeling

The *thinkers*, like the *intuitive* learners, need to feel challenged by the course and, like the *sensing* learner, want the objectives clear and the course structured. In this way the student feels in control of his own learning. The tasks and activities should lead directly to the final goal that he has for the course and language in a very business-like manner. They work best alone.

The *feelers* need most to feel relaxed in the classroom which should have a harmonious atmosphere and feel a positive relationship with the teacher. They work best in groups. The course should be orderly and structured, but at the same time, flexible so the students can diverge into related areas, especially topics about culture and of social interest.

Judger/Perceivers

Judging learners, as seen in other types listed above, are orderly and predictable and want these same characteristics from their courses, which should present clear goals they can strive for. They can be prepared through various activities to become better risk-takers, but do not expect this of them immediately. They need guidance to help them develop routines and to work with others in achieving group objectives.

The *perceivers* prefer a flexible program with variety, risk-taking opportunities and with topics and activities that change frequently. They enjoy a program which provides a chance for individualization in tasks and materials.

By now, you, the reader, are probably overwhelmed by the implications and the enormous task of effectively teaching to all student-style types. How can you possibly provide a classroom where all of these factors are taken into account? If you look closely, you can find that many of the learner styles are similar and share common threads. Five types (*introverts*, *sensors*, *feelers*, *judgers* and *thinkers*) prefer a class with clear goals and objectives that they can work towards. Others (*intuitives*, *perceivers* and *extroverts*) need the curriculum to be flexible; while the *feelers* want a class which is both flexible and with clear goals and objectives. These characteristics, of course, describe any well-designed and taught EFL program.

Approximately half need a challenging course and enjoy taking risks, while the others need more time to prepare or process information before speaking, role-playing or other form of risk-taking. This means that the teacher should progress more slowly, training the reluctant students to become risk-takers, while, at the same time, allowing the more adventuresome risk-takers to use their energies creatively. Some learners

like to work in groups, others are more field-independent and prefer to work alone. Both types should be allowed to work in which ever way they feel the most comfortable.

By recognizing that each student is different, we can organize our classrooms more effectively. Of course, this implies that our approaches and methodologies become more learner-centered, allowing our students to be more in control of their learning experience and to make choices which effect the direction their learning will take. This requires greater teacher awareness of learning styles, more teacher flexibility in planning and a risk-taking teacher.

What style are you?

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March 8-12, 1994
The Baltimore Convention Center
Baltimore, Maryland U.S.A.