

NO LEARNING STYLE LEFT BEHIND

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Knowing how students learn is an immeasurable part of a teacher's preparation. Interchangeably called cognitive styles, thinking styles, learning style preferences, or learning orientations, learning styles are defined in various ways in the literature. Some of these definitions are: the ways in which an individual characteristically acquires, retains, and retrieves information (Felder, 1995); a unique collection of individual skills and preferences that may affect how a person perceives, gathers and processes information (Johnston & Orwig, 1999); people's consistent ways of responding to and using stimuli in the context of learning (Claxton and Ralston 1987); characteristic, cognitive, affective and psychological behaviors that serve as relatively stable indicators of how learners perceive, interact with, and respond to the learning environment (Keefe 1979); the biologically and developmentally imposed set of characteristics that make the same teaching wonderful for some and terrible for others (Dunn and Griggs 1988); the way students begin to concentrate on, process, internalize, and remember new and difficult academic information and is comprised of both biological and developmental characteristics that make the identical instructional environments, methods, and resources effective for some learners and ineffective for others (Dollar 2001). These definitions reflect the different perspectives or angles that the authors have taken in their understanding of learning styles. Disparate as they may seem, they all show features common to all learning styles — unique to certain individuals, a preference, characteristic of learners, and geared towards efficient learning. Simply put, they are different approaches to learning. It must also be stated that one learning style is not better or worse than another. It is simply different. Depending on the skill being

learned, students profit a great deal when taught to use learning styles outside of their comfort zone that are best suited to achieve success in that particular skill. As long as the learning objective is achieved, students are better off using the learning style that they are comfortable with. Having said that, however, it must be noted that they also need to stretch their preferred learning styles. They should adopt learning styles and strategies outside of their comfort zone if that is what it takes to succeed.

Cognition, or how one acquires knowledge, comes into play in learning styles, which are an individual variable among cognitive factors in learning. Students filter knowledge through different lenses. For example, the visually-oriented learn more when they use their sense of sight. When one observes them consistently asking to see how a word is written or spelled, one detects a sign of visual orientation. They do not seem to learn unless they see the word, the phrase, the sentence, the chart, the map. They are highly depended on their sense of sight, which is not confined only to their physical eyes. They also rely on the mind's eye. Thus, listening to spoken text, they form mental pictures of what they hear. They have a story board in their head. Even when performing a task in a skill that is not their strong suit, they use their preferred learning style to help them achieve success.

Conceptualization, the processing of information, also colors learning styles. How do students remember information? How do they arrange it in their brain and create connections? How do they convert information into knowledge? Do they use prior knowledge to understand new information? Globally-oriented students look at the big picture and usually miss the details. They know what the text is all about but cannot give enough details to support their thinking. They understand the general idea of what they are reading or listening to because they connect the few dots that they see, gleaned mostly from prior knowledge and/or experience, and make a generalization about what the text is about. Usually, students in the early stages of learning are more global than analytical for a variety of reasons. They do not have enough language to see the details, or they do not have the study skills yet to learn a certain subject, or maybe they are new to the system — pedagogic or otherwise. They do not have the arsenal of strategies yet to see both the forest and the trees. They see the forest but do not realize there are indeed trees making up the forest. The details are lost to them because their perception of the content is based solely on the big picture.

The affective, or emotional, side of learning also shapes learning styles. How many times have we heard students say that they do not like the teacher, the room, the building, the administration, the native speakers of

the language, their culture? They become introverted during the speaking hour, for instance, because of these feelings of dislike. Motivation, values, decision-making styles, emotional preferences all conspire to create their learning styles. The shy, introverted student usually postpones speaking the target language, sometimes way too late in the game. Teachers have a role to play in getting them out of their shells, infusing more self-confidence in them enough to encourage them to experiment with the language, and giving them enough boost to be an active participant in the learning experience. On many an occasion, these students, though, are the teacher's last resort when the questions become too difficult for the entire class to answer. They just do not have the desire, inclination, or need to volunteer a contribution to the learning of the entire class. We cannot neglect these students, as we teach the entire class, not just those sharing our own learning styles or those most readily participating in the acquisition of knowledge.

Three broad approaches relative to students' motivation come to mind vis-a-vis learning styles. The surface approach is predicated on the motivation to "finish the course." Understanding information becomes secondary to remembering it. We all have had students whose sole *raison d'être* for being in our class is the credits they need to get their degrees. The foreign language course is something they may need to do, even when they elect a specific language, so they have to finish it. These students usually do not bother with learning styles because they are quite content to just go with the flow of the class. As long as they are getting passing grades, and the prospect of finishing is bright and rosy, they do not have a care in the world. The deep approach, on the other hand, stems from the motivation springing from an interest in the subject and the desire to learn more about a subject in order to understand it and then apply it. Students with this motivation look to their own learning styles and experiment with others to maximize their acquisition of language and their readiness to use it. They also tend to deduce personal meaning from the information, thus hastening their understanding. Diplomats, military attachés, and businessmen and women going overseas are prime examples of this lot. It is always a good idea to expose them explicitly to learning styles different from their own to expedite their mission of learning the language well enough to use it, whether for leisure or work. Specialized schools excel at this because they know the stakes. It would bode well for every learning institution to inculcate this view in the students' minds — learn the foreign language as if their life depended on it. Finally, the strategic approach arises from the motivation to achieve high marks and/or to compete with others. Students using this approach usually use both surface and deep

approaches to maximize their efforts. They also tend to take responsibility for their own learning and thus develop their own set of skills to achieve their goals.

Another trio of broad approaches, this time distinguishing among different kinds of learning, are reflective learning, adaptive learning, and collaborative learning. Reflective learning, as the name implies, refers to developing the habit of reflecting on one's learning. Students should always be encouraged to think back to how the day went and look at how they learned — or failed to learn. They can learn many lessons from introspection: discovering new insights about their learning styles and alternative ones, zeroing in on successful techniques and strategies, testing and validating theories and assumptions about their learning styles, among others. Keeping journals or logs and brainstorming greatly aid in the process of reflection. Reflective learning many times leads to adaptive learning, where one employs different styles for different skills. Oftentimes, mixing and matching learning styles yield productive results. Students discover multiple vistas, enriching their view of their learning experience. Collaborative learning — sharing knowledge, ideas, strategies, etc., with others — is cooperative learning at its best. Students are best encouraged to have study partners, especially speaking partners. One cannot underestimate input from fellow students or native speakers outside the class. Extroverted students, the usual proponents of this type of learning, often improve their proficiency in the language faster than those who study on their own, although initially they may not have the grammar down pat or the vocabulary leaves much to be desired. There is something that can be said about sharing knowledge that expedites the learning process. A tangential benefit is that it leads students to realize what they know, and what they still need to know. This realization is crucial if they want to acquire a higher level of proficiency in the language.

What else affects learning styles? Time of day does. Some students learn better in the morning, others in the afternoon, and still others, at night. This preference is evident when they have a choice of class schedules. Weather conditions or room temperature also affects learning styles. We cannot learn in a very cold or very hot room, for example. Some learners are bothered by a well-lit room; others, by a dimly-lit room. Some want absolute silence when they are studying; others can tolerate noise — a little or a lot. One's physical condition has an effect on learning styles, too. Probably no one in a normal circumstance can learn on an empty stomach or when one is feeling some kind of pain, which can also be emotional or psychological. Learning under such conditions, students are likely to shift to a different or secondary learning style — usually some

kind of short cut or compensation. Motivation, persistence, and responsibility also impact learning styles. The more motivated a student is, the more successful he/she tends to be. A student who never gives up even when the odds are stacked high against him/her, more often than not succeeds. (A Chinese proverb springs to mind: Persistent water dropping will make a hole in a rock.) When students realize that they are responsible for their own learning, they do their best not to fail, because they know the failure is theirs and theirs alone.

It may be useful at this point to contrast abilities and learning styles. (1) Abilities show how far up the ladder of proficiency the student is. Learning styles, on the other hand, describe a person's way of thinking, remembering, or solving problems. As such, these are very personal means to an end, at times unconscious and genetically imposed but most often a choice of preference. (2) Abilities move from zero to maximum value. They chart progress in the student's acquisition of proficiency in the language. The Oral Proficiency Interview (OPI) tells testers where exactly the student is at the time it is administered. Learning styles, on the contrary, are bipolar dimensions. Students may be at the same point of the learning styles inventory at any given time. (3) Having more of an ability is usually beneficial. The more abilities students have, the more chances they have of succeeding in all phases of their language studies. Having a particular cognitive style, however, simply means having the tendency to behave in a certain manner. This may be the key to their success. Nonetheless, as seen earlier, stretching their learning styles to offset their weakness in certain skills may define a student who knows how to use — manipulate — different learning styles to achieve success.

Observation is usually a reliable tool to determine students' learning styles. The consistent way of learning that they exhibit points to a certain learning style. We should also, however, take advantage of many learning-styles instruments for a more scientific approach to the subject. There is a great number of on-line learning styles surveyed, and here are a few that I have personally found useful.

| Name, Author | Brief Description | Format |
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| E&L Learning Style Questionnaire. Madeleine Ehrman and Betty Lou Leaver, 1997. | 30 items. Pairs of statements are presented, showing opposite strategies or inclinations. Respondents mark a number on a continuum of 1 to 9 near the statement showing their preference. Shows eclectic traits (10) and their opposite synoptic traits. Self-scoring. | Questionnaire with paired statements. Respondents mark their preference for one or the other. |
| Index of Learning Styles (ILS), Richard M. Felder and Barbara A. Soloman, 1991. (Based on a learning style model by Felder and Linda K. Silverman) | For materials science and engineering students. 44 items. 4 dimensions (active/reflective, sensing/intuitive, visual/verbal, sequential/global). On-line since 1996. Translated into several languages. Self-scoring. | Questionnaire. Choice of 2 answers. For individual and group profiles. |
| Paragon Learning Style Inventory (PLSI), John Shindler, 1992. | 48-item general version. 52-item version for students or adults. 4 academic types (one or the other: extrovert/introvert, sensate/intuitive, feeler/thinker, judge/perceiver). 8 dimension types. | Survey. Self-administered. Choice of a or b response. |
| Myers-Briggs Type Indicator (MBTI), Katharine Cook Briggs and Isabel Briggs Myers, 1942 | Personality preference survey instrument. 93 questions. 4 dichotomous dimensions (ES pattern: concrete active, IS pattern: concrete reflective, EN pattern: abstract active, IN pattern: abstract reflective). | Questionnaire. Choice of 2 responses. |
| Grasha-Riechmann Student Learning Style Scales (GRSLSS) | 60 statements. Learning styles classified as: independent, avoidant, collaborative, dependent, competitive, participant. | Checklist. Range of 1 (strongly disagree) to 5 (strongly agree). |

Rebecca Oxford's Style Orientation Scale for Language Learning (SOS-L) is a checklist with five sections, each with 20 statements, except for the first section, which has 30. Respondents select a number from a range of 0 to 3 (Never to Always) representing their approach. Section 1 involves sensory preferences: visual, auditory, and hands-on. Section 2 addresses relations with others: extrovert or introvert. Section 3 deals with relations with ideas: intuitive vs concrete-sequential. Statements in Section 4 refer to orientation to learning tasks: closure-oriented vs open-oriented. The last section identifies over-all orientation as either global or analytic. A self-scoring section at the end of the survey completes the packet. Short descriptions of these learning styles accompany the scoring section.

What are some characteristics of students exhibiting common learning styles, and what are their pitfalls? Visuals like to take a lot of notes, color codes, rely on written directions to understand tasks, look at pictures while the teacher is talking, and are voracious readers. They find oral directions difficult to follow, lack visual support for lectures, and cannot listen well without some kind of preparation. Auditory learners often sub-vocalize, tend to be "terribly" fluent early in the course, dislike taking notes, tend to read and talk aloud, and are lost when presented with written directions. They have problems remaining quiet and do not like visual work. Hands-on learners cannot sit still, enjoy working with tangibles, doodle a lot, prefer computer learning to books and the like, also become "terribly" fluent early on in the course, and are always on the go. They are uncomfortable taking pen-and-pencil tests, impatient with reading and listening materials, and suspicious of quiet classes.

Extroverts volunteer a lot even when they hear only the questions half-way through, are open and often talk a lot, easily adapt to a new group, are socially confident and at ease, are quick with unsolicited opinions, seem to have boundless energy, get energized from socializing, and are risk takers. They cannot sit through a test without making a sound of some kind or shifting in their seat, are uncomfortable with silence, tend to dominate a pair or group discussion. Introverts, on the other hand, often appear reserved, introspective, and quiet; do not like surprises; are interested in their own thoughts, thinking, and feelings; normally think first before saying anything, prefer to work on their own; and shun pair or group work unless they work with someone they are comfortable with. They find speaking classes intolerable, have difficulty meeting new people and talking to them, and take a while to develop proficiency in the language.

Intuitive students like to theorize and find possibilities in the language, enjoy abstract thinking, do not like routine and detail work, live

for the future, trust what makes sense to them, and are random in their approach. They tend to overlook the present and cannot work using a step-by-step procedure. Their opposite number, the concrete/sequentials, prefer step-by-step learning, prefer facts to theories; cannot seem to learn when the teacher skips pages or exercises; do not like abstract thinking; like a beginning, a middle, and an end when presented with a new lesson; read a book from cover to cover; and look for consistency. They have a low tolerance for ambiguities and find it distracting to move from one place in the book or manual to another and back to the first page again.

Closure-oriented students also like to see a beginning, middle, and end; are task-driven and serious because they need to see the end of their endeavors; consider deadlines sacred; plan ahead for assignments; and ask for clear directions. They are easily discouraged when things don't go as planned, tend not to call it a night unless they have done their homework assignments, follow the mantra "duty first before pleasure" religiously, and hate procrastinating. Their opposite number, the open-oriented students, enjoy discovery learning, consider deadlines dead, have an anything-goes attitude, and have a good time learning. They wait for the eleventh hour to do homework or concoct a multitude of reasons not to do it, are not very disciplined, and may tend to overrelax to the point of not learning at all.

Global students are more interested in substance than in form, prefer to see the "big picture," are usually sloppy with their grammar, and like to guess the meaning of unknown vocabulary. They have difficulty locating details in a text. Analytic students, on the other hand, take a while before they answer any question, tend to start practicing speaking midway through the course, want to make sure everything is correct before they say anything, and do not like guesswork. They linger too much on details and sometimes miss the entire picture, need to be prodded to speak, are not risk takers, and are embarrassed when they make mistakes.

So, why should we even bother with learning styles? There are good lessons to learn from knowing how our students learn. The right learning style facilitates learning. Adjusting teaching styles to students' learning styles enhances learning effectiveness. If students cannot learn the way we teach them, then we must teach them the way they learn (Dunn and Dunn, 1978). Matching teaching styles with learning styles has a great potential in terms of cultivating more positive attitudes towards learning and towards enhancing students' academic achievement. Learning styles affect students' approaches to problem solving and participation in activities. To understand their mental processes better, we need to know what their learning styles are and incorporate them into materials writing and

into more effective pedagogical interventions (Felder and Henriques, 1995). Knowing our students' learning styles also goes a long way in achieving balanced teaching styles, for we realize that everybody learns differently and we have to address these different learning styles in the way we teach them, in the activities we create for them, and in the group dynamics we set up for them, thus promoting an optimal learning environment. Knowing our students' learning styles also brings to the forefront the awareness to present information in a variety of modes. It is also motivating for learners to know their own strengths and weaknesses. The knowledge spurs them to stretch their learning styles to match a given situation or task.