The Importance of Learning Styles and Multiple Intelligences in Learning

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Résumé :

La recherche sur les styles d'apprentissage et les intelligences multiples révèle que les individus varient beaucoup dans la façon dont ils apprennent. Certains ont une propension à l'analyse et tendent à appréhender les mots et les phrases dans le détail. D'autres ont une orientation globale, requérant des modèles généraux de langue dans des contextes significatifs. Les élèves sont des styles d'apprentissages différents : visuels, auditifs ou kinesthésique/ tactiles.

Lorsque les styles d'apprentissage de la plupart des étudiants d'une classe et le style d'enseignement de l'enseignant ne concordent pas, les étudiants s'ennuient et deviennent distraits en classe, ont de mauvais résultats aux examens,deviennent découragés à l'égard des cours, du programme d'études et de leur situation ; Dans certains cas, ils choisissent un autre programme d'études ou abandonnent leurs

الملخص:

إن الدراسات في أساليب التعلم والذكاءات المتعددة تشير إلى أن الأفراد يختلفون في الطرائق التي يستخدمونها في معالجة واكتساب المعلومات التي يتلقونها داخل القسم. لقد بينت هذه الدراسات بان هناك علاقة قوية بين الأساليب المعرفية والتحصيل الدراسي.

يُعرف أسلوب التعلُم ـ في المجال المعرفي ـــ بأنه تفضيل الفرد لنمط ما من أنماط معالجة المعلومات واكتسابها.

هناك تنوع في أسس تصنيف أساليب التعلُم؛ فمنها أساليب معرفية في جمع المعلومات وفهمها (بصري ـ لمسي/حركي- سمعي) وهناك تفسيرات فسيولوجية قائمة على كيفية عمل الدماغ- عمل نصفي المخ (نصف أيمن أو أيسر).

يوجد كذلك أفراد لديهم أساليب معرفية تتسم بالتعقيد والتحليل لكسب المعلومات وآخرون يفضلون البساطة من خلال اندماجهم في الأمثلة الشاملة تمكنهم من استيعاب المعلومات.

للأسف لاقت الأساليب القليل من الاهتمام عما تستحقه، وبيان أهميتها ودورها في ما يوظفه الفرد من خبرات، والتي تشير العديد من الدراسات إلى أن

études.Lorsque les enseignants remarquent les faibles notes aux examens, les étudiants qui ne réagissant pas ou hostiles, la faible assiduité et les abandons, ils savent que quelque chose ne fonctionnent pas. Ils peuvent devenir exagérément critiques à l'égard des étudiants (ce qui empire les choses) ou commencer à se demander s'ils exercent la bonne profession. Chose plus grave encore, la société perd des professionnels potentiellement excellents.	كل من النجاح والفشل والذي يعزى غالباً إلى القدرات يرجع في قسم كبير منه إلى أساليب التعلم والذكاءات المتعددة. إن الأساتذة الذين يفتقدون معرفة جيدة حول أساليب التعلم والذكاءات المختلفة يرجعون اللوم على التلميذ متهمين إياه بالكسل وعدم الجدية في العمل . إن الحكم غير المؤسس علميا على التلاميذ وإعطائهم علامات ضعيفة يؤدي إلى فقدان كفاءات تضر بالمدرسة و المجتمع ككل.

Introduction

Do poor marks and negative remarks in school reflect the real value of a learner? It is up to you to decide. But first, follow the story:
Albert Einstein was a day dreamer. He was often chided by his teachers in and was accused of destroying class discipline by his stupid questions. Teachers told him he would never amount to anything, that he would be better out of school. Winston Churchill did poorly at school. He talked with a stutter and a lisp. But he succeeded in becoming one of the greatest leaders of the twentieth century. Thomas Edison was considered as addled for asking so many questions in class. His teacher beat him with a heavy leather trap because of such behavior. Yet, he became one of the prolific inventors of all time. Steinbeck, Hemingway and many others left school without a degree, but left landmarks in the world of literature. These people can never be said to be stupid persons. The quote **"if the pupil is bad, the teacher is worst"** can perfectly be applied on them. Their learning preferences were simply ignored at school. They had learning styles that were not suited to their teachers' styles.
In this respect, Lorna Ridgeway (1973) quoted: "**Many failure attributed to the child is in fact a failure in the curriculum, the method or the teacher"** Unfortunately that mismatch continues today for millions of others and it is probably the biggest cause of school failure not only in Algeria but all over the world. It is high time for a teacher to know the learning styles of his students and his own way of instructing. Adjustments can then be made to

accommodate learners ,needs and reach a very productive learning environment.

I- What is a Learning Style? Definitions

All individuals have preferences for ways to learn and grasp a subject at different rates with different levels of completeness. These preferences are referred to as an individual's learning styles.

According to Reid (1987) a learning style is a consistent way of functioning which reflects cultural behavior patterns. Like other behaviors influenced by cultural experiences, the learning style may be revised as a result of training or changes in learning environments. He believes that learning styles are "moderately strong habits rather than intractable biological attributes .To illustrate Reid's claims we suggest the following example:

A Western man saw his Asian friend putting a bowl of rice on his grandfather's grave and asked , "when will your grandfather get up to eat the rice?" to which his friend replied : "At the same time that your grandfather gets up to smell the flowers you put on his grave." (Serbrenia J. Sims J.1995)

Keefe (1979), quoted in Rod Ellis, defines a learning style as:

....The characteristic cognitive, affective, and physiological behaviors that serve as relatively stable indicators of how learners perceive, interact with and respond to the learning environment... Learning style is a consistent way of functioning that reflects underlying causes of behavior.

Dunn (1989) defines learning styles as "a biologically and developmentally imposed set of characteristics that make the same teaching method effective for some students and ineffective for others."

Jacques CHEVRIER, (2000) in an article dealing with learning styles cited the definitions of many researchers, among them:

The style of learning is "a pupil's constant manner to answer to stimuli and to use them under learning ".

(Claxton and Ralston, 1978, p. 7.)

Learning styles are "cognitive, emotional and physiological behaviors of individuals that serve like relatively steady indicators of the manner of which the learners discern, interact and answer in a learning environment ".

(Keefe, 1979, p. 4,)

"The learning style of an individual is the manner of which this person is programmed to learn most efficiently, that means to receive, to understand, to keep and to be capable to use new information ".

(Reinert, 1976, p. 161,)

Up to here, definitions put the accent on the manner to treat information and to act in context of learning. They claim that difference in style of a pupil

means that some educational approaches are more efficient than of others for him. They also send back to the characteristic manners to act, to predispositions or preferences that concern the learner, contexts of teaching learning, and the process of information treatment.

II- Learning Styles Dimensions

To differentiate between learning styles Gardner and others offered three dimensions: perceptual, cognitive, and affective.

II.1- Perceptual Dimension

This dimension of learning is generally influenced by any sensory or physical element that reflects the individual's response to external stimuli. The perceptual elements it includes are: visual, auditory and tactile.

II.2- Cognitive Dimension

This dimension refers to the learner's ways of receiving, storing retrieving, transforming and transmitting information. It includes issues of right and left brain functioning (hemisphericity), global and analytical perspective, and field dependence/independence. These modalities reflect the way an individual thinks and processes information. E.g., right-brained, global and field dependent individuals view things holistically and broadly. The left-brained, analytical and field dependent need detailed outlines to grasp a thing.

II.3 –Affective Dimension

This dimension encompasses the different aspects of personality. Personality traits are the ones which set the stage for how an individual acquires and integrates information. These reflect the genetic, culture, environment and experiences influences. In a school context, for example, the way a student interacts, and deals with elements such as attention, emotion and valuing are part of the affective dimension of learning. It reveals his/her preferences for the social setting of learning, e.g., working in groups, in pairs or alone,

III- Why are Learning Style Important?

Information about learning styles is so important to both the teacher and the student for a variety of reasons. Among them:

-Low satisfaction or poor performance in a course or particular activity may be misinterpreted as lack of knowledge or ability when it is actually a difficulty or mismatching with a particular style of learning.

-Teachers with an understanding of their pupils' learning styles are better able to adapt their teaching methods appropriately. Teachers who introduce a variety of appropriate adequate teaching methods into their classes are more likely to motivate and engage students into learning.

-Students who learn about their own styles become better learners; have more practice attitudes about their studies and greater self-confidence.
-Information abut learning style can assist with poorly prepared pupils and help teachers become more sensitive to the differences which students bring to the classroom.

IV- Learning Styles Models

IV.1- The Myers- Briggs Type Indicator

This model classifies students according to their preferences and suggests that learners may be:

a- Extroverts or Introverts

Extroverts are those who try things out and often focus on the outer world of people. Introverts think things through and focus on the inner world of ideas.

b- Sensors or Intuitors

Sensors are practical, detail oriented .They focus on facts and on procedures. Intuitors are imaginative, concept oriented .They focus on meaning and possibilities.

c- Thinkers or Feelers

Thinkers tend to make decisions based on logic and rules. They are skeptical. Feelers base their decisions on personal and humanistic considerations. They are appreciative.

d- Judgers or Perceivers

Judgers seek closure even with incomplete data and often set and follow agendas. The perceivers resist closure to obtain more data. They often adapt to changing circumstances.

IV. 2- Kolb's learning Style Model

This model suggests that any learner has a preference for a certain stage of learning. The stages concerned with Kolb's model might be summarized as follows :

1-Concrete Experience

Here, all learning should stem from one's concrete experience. Exposure to the real world is the basis for learning development.

2-Reflection- Observation

To establish generalization, learners need to observe in a systematic manner and reflect on what they have observed. This stage is drawn upon the first stage.

3-Abstract Conceptualization

Following stage two, learners should theorize in an abstract way to understand and make sense of their experience.

4-Active Experimentation

Theorizing in stage three should allow for a complete understanding of experiences. It provokes further questions which require a going back to the first stage ,concrete experience ,and acting upon it to produce change.

IV. 3- Herman Witkin's Field Dependence / Independence Model

Developed by H .Witkins, this model proposes that individuals fall into two categories: **analytic** (field independent) and **holistic** (field dependent).The analytic is more able to separate a problem into components, focus on the component which fits their situation and then make decision. This group can decompose a whole into constituents and then manipulate these constituent elements independently of one another. In a language learning situation, the analytic are able to analyze the linguistic material they are exposed to, identify its components and then explore the relationships between these components. Hence, separating the essential, for a given situation, from the inessential would enable the analytic to focus on the data which would be most helpful and to promote learning with maximum efficiency. In contrast, field dependent people are less analytical. Rather then analyzing situations into components, they perceive situations as wholes. They are more likely to depend on other peoples' opinions to make judgments. Furthermore, the field independent have the ability to process information but they avoid situations where language is communicatively oriented, i.e. situations where language is used for communication. The field dependent are at ease and sensitive in communication situations but they are ineffective information processors.

We can infer that Field independence individuals excel on non communicative test while Field dependent individuals excel on communicative situations.

In a more concise introduction of this model, Witkins and associates (1971) gave the following description :

"In a field dependent mode of perceiving , perception is dominated by the overall organization of the surrounding field , and parts of the field are experienced as 'fused'. In a field-dependent mode of perceiving , parts of the field are experienced as discrete from organized ground.... 'field dependent' and 'field independent' like the designations 'tall' and 'short' are relative.'

IV.3. 4- Honey and Mumford's Learning Styles

In their book, Manual of learning styles (1992), Honey and Mumford identified four learning styles which characterize the learner:

1-The Activist

This learner likes doing tasks. In the language classroom, he feels so easy with communicative tasks. He enjoys using language.

2-The theorist

For this learner, understanding the underlying theory is the key to learning. He wants to know why a particular language form is used in a specific situation or why a particular communication technique is appropriate in a particular setting.

3-The Pragmatist

Practising in controlled environment is the best way for this learner to learn. He enjoys whatever is controlled because he feels secure and there is no risk to deviate.

4- The Reflector

This learner learns by watching others doing a task. His ability to perform in the language is affected by a feeling of insecurity in communication activities.

IV.4- Gardener's Multiple Intelligence model

Howard Gardener (1983) proposed a view of natural human talents he labeled multiple intelligences .This model is one of many learning style types and is generally applied in education. Gardener claims that his view of intelligences is culture free and is not associated with traditional conceptual narrowness of the models of intelligence such as the IQ testing model. He believes these develop differently in different people due to both heredity and training. The eight intelligences as suggested by Gardener are presented in the table below along with what they entail:

Linguistic learner	This learner likes getting involved in reading, writing, listening and speaking. He has the ability to use words effectively both orally and in writing. Example: The ability to remember information, to convince others to help you and to talk about language itself.
Logical-Mathematic learner	He likes doing experiments and figuring things out. He prefers being involved in solving logical puzzles. He has the ability to reason and use numbers effectively: example: the skill of understanding the basic properties of numbers and principles of cause and effect.

Spatial learner	This learner likes to draw , build and design .He also hopes for getting involved in determining one's orientation in space and moving from one place to another This intelligence is related to the ability to sense form, space, color, line and shape. Example: the ability to graphically represent visual or spatial ideas.
Musical Intelligence	This learner is fond of composing, singing and conducting. This involves the ability to sense rhythm, pitch and melody. Example: the ability to recognize simple songs and to vary speed, tempo and rhythm in melodies.
Bodily-Kinesthetic learner	Involved in using one's body to perform skilful and purposeful movements (dancers, athletes and surgeons) .It is the ability to use the body to express ideas and feelings to solve problems. Included in such activity, physical skills such as flexibility speed and balance.
Intrapersonal learner	Involved in understanding oneself and having insight into one's own thoughts, actions and emotions (self-understanding). This intelligence is concerned with the ability to understand one's strengths, weaknesses, moods, desires and intentions. Example: the ability to understand how one is similar or different from others remind oneself to do something, know how to handle one's feeling such as how to behave when one is angry or sad.
Interpersonal functioning	Involved in understanding of others and one's relations to others. Being high in social skills. (Psychologists, teachers and politicians are supposed to be high in this type of intelligence). This talent emphasizes the ability to understand other persons' feelings, moods, motivations and intentions. Responding effectively to other people in some pragmatic way is an example of this.

Naturalistic learner	This intelligence involves the ability to understand and work effectively in the natural world. This is exemplified by biologists and zoologists. (the ability to recognize and classify plants, minerals, and animals in all variety of flora and fauna.

Moreover, the role of a teacher varies according to each of the eight intelligences. This can be illustrated in the following table:

Intelligences	Teacher's role
Linguistic learner	Helping pupils develop this kind of talent by crating a rich print environment, providing things to look at , listen to, and write about. Encouraging interaction among pupils and between the teacher and the pupils.
Logical-Mathematic learner	Providing pupils with manipulatives for experimentations with numbers by using simple machines or computer programs to help children think about cause and effect.
Spatial learner	Encouraging students to vary the arrangements of materials in space, like creating charts and bulletin boards.
Musical Intelligen	Helping pupils develop this intelligence by using tape recorders for listening and singing and learning new songs.
Bodily-Kinesthetic learner	During the foreign language lesson, the teacher should provide pupils with opportunities for physical challenges.
Intrapersonal learner	Letting pupils express their own preferences and help them understand their own styles of learning.
Interpersonal functioning:	Helping pupils develop their intelligences through activities that involve them in solving problems and resolving conflicts.
Naturalistic learner	Focusing pupils' attention to the world outside the classroom.

V.3.9- The Brain Dominance Model

Brain theory research asserts that information is processed differently by the two hemispheres of the human being. The left hemisphere has the verbal, sequential and analytical abilities. The right hemisphere has the global, holistic and visual functions. Kinsella (1996) argued that a stronger verbal/analytical faculty may excel with the traditional teaching model such as listening to lectures, reading textbooks and doing writing assignments. The right brain shows strength for creativity and problem solving. Thus, teaching methods need to be varied to help pupils develop the use of both hemispheres and encourage them at the same time, to perceive information analytically and in a relational way. This might be illustrated in the following tables:

Material presentation

Left hemisphere	Right hemisphere
-Presenting materials that are practical. -Giving structured lectures with systematic instructions. -Providing linear, sequential processing of input. -Using words to define or describe terms, rules or concepts. -Focusing on differences with detailed information. -Drawing conclusions based on reasons and facts.	-Presenting materials of personal, factual and social context. -Giving lectures with varied visual illustrations. -Providing opportunities for multisensory learning (auditory , visual and tactile) -Focusing on similarities and overall information. -Integrating component parts and organizing them into a whole.

Class related activities

Left hemisphere	Right hemisphere
-Offering logical problem solving activities with objective exercise format. E.g. true/false; multiple choice QQ; matching. -giving task oriented analytical exercises. -Allowing pupils to work independently or with a compatible peer.	-Offering intuitive problem solving activities with open - ended format. E.g short answers, writing a paragraph, essays. -Grouping students to work collaboratively.(Group or pair work.)

In another study carried out by Evelyn C. Davis (Forum **V 32 No 3,)**, the left brain learner and the right brain learner were described as follows:
-The left brain learner is often called linear or analytical. Linear, because he likes to process information line by line. Analytical, because he likes to look logically at details and facts.
-The right brain preference individual is called a global learner because he sees the big picture, the overview, and processes information as a whole.
-The left-brain learner is usually more logical, organized, and disciplined. He likes to look at details, and makes decisions by facts.
-The right-brain learner likes things to be informal and spontaneous, is usually creative, and tends to make many decisions based on intuition and feelings.
-Persons with the left-brain preference usually find theoretical details important and immediately interesting, while those who prefer the right-brain functions find theory interesting only after the how to do is mastered.
-Left-brain learners can apply new information quickly, and usually prefer to work alone.
-Right-brain learners need longer to assimilate material and often prefer to work with others.
-Individuals with left-brain preference tend to be more time-oriented and competitive, while those with right-brain preference are usually more event-oriented and generally less competitive

In the language learning field, it should be mentioned that there are skills which require analytical sequential and left brain processing. Other skills involve right brain dominance, to note guessing and associating. However, it is not astonishing at all to see good language learners with either left- brain or right-brain dominance who achieve a high degree of fluency and accuracy. This happens because such learners use both brain skills according to the type of activity at hand. For this reason, and in order to better one's language learning while using brain dominance, the following guidelines are to be respected:

- The left-brain analytical skills should be used to determine the purpose of a learning activity. Once one is involved in the activity, most of attention must be put on the content of the message and let the right-brain function.

According to James Asher, author of the Total Physical Response method, and direct association methods for building listening comprehension rely more on right-brain processing than on left brain processing. One should not consciously try to figure out every detail when using these methods. Subconscious should do the work.

Here are some warnings about using your brain dominance for language learning.

- Analytical thinkers who make good linguists sometimes never acquire communicative fluency in a second language because their left-brain, sequential processing slows them down.
- Right-brained, global thinkers sometimes become quite fluent in comprehending and expressing themselves in a second language, but never become truly accurate. They are content to get across the main idea without worrying about the details.

Furthermore, and in order to achieve very satisfactory results, left-brain learners are recommended to follow carefully these tips and apply them in any learning situations:

- Any formal language school program fits perfectly left-brain skills. Learners should take advantage of this program because it is fruitful and enjoyable.
- Left-brain skills are strength for designing and carrying out a personal language learning program. Learners should benefit from this activity.
- Left-brain learners should use their analytical skills to learn the language by breaking words into their parts and then identifying the rules for putting words together.
- Left-brain learners should never expect too much of themselves. Language learning does not always yield to an organized approach and it takes time.
- Figuring out the important factors of any communication situation is an easy task for analytical and organizational skills. Hence, Left-brain learners should excel in this activity because it will enable them to respond appropriately in such situations.
- Left-brain learners' mastering of techniques such as grammatical analysis, drill activities, and hypothesis testing must serve as prompter towards better learning.

Concerning right-brain learners, they should consider the following:

- Since learners with right-brain dominance are often frustrated by traditional language programs where a grammatical syllabus is imposed, they should take advantage of any program organized around communicative techniques.
- The language learning activities which call for creativity and innovation and involve at the same time interaction with people, are the ones which yield better results.
- Whenever possible, choose language learning activities that involve interaction with other people and that call for creativity and innovation.

- Learners with right-brain dominance should make use of their intuition to guess meanings from context.
- Pictures and images are to be used continuously since they help such learners remember ideas and words.
- Learning to be accurate is a vital step towards achieving real proficiency in a language.

Conclusion

Learners, whatever their age and level, preferentially take in and process information in different ways: by seeing and hearing, reflecting and acting, reasoning logically and intuitively, analyzing and visualizing. Teaching methods also vary from one teacher to another. Some instructors lecture, others demonstrate or lead students to self-discovery; some emphasize memory and others understanding. When mismatches exist between learning styles of most students in a class and the teaching method of the instructor, the students may become bored and inattentive in class, do poorly on tests, get discouraged about the courses, and themselves. This may lead to their dropping out of school. Teachers, when confronted by low test grades, unresponsive classes, and dropouts, often become overly critical of their students .They think that the pupils are "stupid", unwilling to cooperate and 'not made for school'. This has never been correct. Teachers should know and remember that students will doubtlessly perk up when they are taught the way they learn best. Learning to spot their general processing style (global or analytical), and their preferred modalities (tactile, auditory, visual) is the first step towards a more efficient teaching /learning environment.

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Etude de l'appropriation des nouveaux moyens de communication et leurs effets sur l'acquisition de compétences linguistiques en français langue étrangère

Internet et les étudiants de français à l'université de Sétif

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Résumé :

C'est une enquête sur l'usage que font les étudiants d'internet, en Algérie. L'analyse des modalités d'utilisation de la toile et la mesure de sou influence sur l'acquisition des compétences linguistiques indiquera le niveau de littératie des apprenants du français langue étrangère, dans un contexte plurilingue.

Il s'agit de savoir si la non-maîtrise de la langue française (Le) est un obstacle à la communication ou bien, si les lacunes et les difficultés en expression sont résolues par l'utilisation d'internet.

Mot-clé : littératie. Étudiants. Internet. Compétences.

الملخص:

تتطرق هذه الدراسة إلى كيفيات استعمال الأدوات الحديثة للاتصال والمعلومات من قبل طلبة السنة الأولى فرنسية في جامعة سطيف.

إن تحليل هذه المعاملة في محيط متعدد اللغات يجعلنا نتساءل عن ما إذا كانت نقائص إدراك اللغة تسهل الاتصال وتساعد على التعلم أم تستبعد أي إمكانية ربط.