International Journal of Educational Research and Studies
www.journalofeducation.net
Online ISSN: 2664-6811, Print ISSN: 2664-6803
Received: 20-11-2021, Accepted: 05-11-2021, Published: 21-12-2021
Volume 3, Issue 4, 2021, Page No. 40-45

A descriptive analysis of learning styles of students

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Abstract
Learning has always been a major field of research interest for many researchers, particularly those interested in studying the learning process. Learning styles reflects on how one learns better, and the best strategies for various learners. Many people agree that any specific way of using different kinds of knowledge is superior to others. Criticism of learning styles and their descriptive analysis has been provided in an efficient manner in this research paper. Some studies relating to Learning styles models have been described in this research paper.

Keywords: learning style, learning style models

Introduction

Recent years have seen an important change in the course of education, and students now study more than ever. The attention has shifted from the instructor, the transmission of knowledge, and how best to enhance the transmission of information, to concentrate on the learner and how best to facilitate learning. The theory of individualized learning patterns was first developed in the 1970s and has been generally embraced in recent years. An individual's learning style is the way he thinks, not the same as learning ability. Everyone has a particular learning style. Learning types are dynamic and varied ways of learning. Students vary in their learning patterns, talents and interests, but everyone learns differently. Some students are more comfortable with numbers, data, and algorithms, while others have a knack for designing computational models. Some people like visual details more, like snapshots, graphs and photos, whilst others get more out of it. The construct of learning style has gained considerable interest in educational circles in recent years. There has been a long tradition of psychological and educational theory on research about learning style. Recent research into their ways in which students learn and represent information in memory suggests that, if children are to gain to maximum amount of benefit from education, account must be taken of their different ways of learning. So educationists describe various roles of learning styles in education from time to time. Several psychologists and researchers asserted that study involvement and learning styles of the students play a crucial role in teaching learning process. Successful teachers are those who sensitize themselves to the way in which children can learn. Application of learning styles leads to the development of diverse range of professional behaviour.

There is a need to incorporate the component of learning styles of trainees in service program. According to him, by assessing the unique learning styles of individual teachers and accommodating their preferences, in-service facilitators can design the programmers which have intrinsic value to the teachers and can lead to professional competencies. There is no reason in the world not to diagnosis the learning styles of every student and provide guide lines and alternatives for teaching them through their individual strengths. In many respects, the emphasis on learning styles benefits. Students build confidence in their strengths and develop different methods to cope with the tough circumstances that eventually occur. Students start seeing how they learn most quickly and effectively. Often students are reluctant to tackle an assignment in a particular manner because they have no other way of doing the task. These students are often tested in finding new and better approaches to read. The benefits of learning style assessment include helping students gain trust in their talents and develop different methods for dealing with difficulties in life. They continue to understand how they learn better and how effective they can be. The students should be responsible for their own learning. Students understand that their way of learning is not better or inferior to their classmates, but that their way is simply different from the way every child learning. Now some learning style models have been described below.

Learning Style Models

Dunn and Dunn Learning Model (1978) is one of the most common approaches to learning styles. Due to research conducted in classrooms, they determined how people respond to various instructional materials. Some individuals prefer studying alone, while others prefer sitting in a group or person to impart information. From this initial study, they established five main characteristics of student learning styles which includes social, environmental, cognitive, biological and psychological. The success of Dunn and Dunn's classification system is due to the explanatory nature of the system based on classroom interactions of similar students. Various researchers have attempted to hypothesize ways in which learning style theory can be used in the classroom. Two such scholars are Rita Dunn and Kenneth Dunn, who build upon a learning modalities approach. Although learning styles will inevitably differ among students in the

classroom, Dunn and Dunn say that teachers should try to make changes in their classroom that will be beneficial to every learning style. Some of these changes include room redesign, the development of small-group techniques, and the development of "contract activity packages". Redesigning the classroom involves locating dividers that can be used to arrange the room creatively (such as having different learning stations and instructional areas), clearing the floor area, and incorporating students' thoughts and ideas into the design of the classroom. Dunn and Dunn's "contract activity packages" are educational plans that use: a clear statement of the learning need; multisensory resources (auditory, visual, tactile, kinesthetic); activities through which the newly mastered information can be used creatively; the sharing of creative projects within small groups; at least three small-group techniques; a pre-test, a self-test, and a post-test. Dunn and Dunn's learning styles model is widely used in schools in the United States, and 177 articles have been published in peer-reviewed journals referring to this model. However, the conclusion of a review by Coffield and colleagues was: "Despite a large and evolving research programme, forceful claims made for impact are questionable because of limitations in many of the supporting studies and the lack of independent research on the model."

Kolb Model of Learning Styles (1984)

Kolb's model is one of the most commonly applied and well known learning styles models. Psychologist David Kolb developed his theory of learning which encompasses how people learn best. His model is based on the experiential learning principle and as described in his book, "Educating for Real World Competitions." He claimed that our individual learning styles are a result of genetic inheritance and environmental factors and require effort to be overcome. Furthermore, Kolb defined four distinct learning types, developed a theory of experiential learning, and developed a learning style inventory. In his experiential theory of learning, learning is presented as a four-step process.

Concrete, immediate, and valuable interactions are used to observe. Then, the person takes these observations and constructs a theory of how these observations could be connected together. In the next step, the learner descends to utilize logical thought and generalization to validate their hypothesis. The learner checks the concepts consequences in unfamiliar, uncertain, or new circumstances. After initiating new experiences, the process then loops back to the first stage. The learning styles defined by Kolb are focused on overall dimensions of active reflection and concrete reflection.

Peter Honey and Alan Mumford's Model (1992)

Peter Honey and Alan Mumford based their learning style model on behaviorist thought and management studies. Honey and Mumfords model indicates that people have a variety of learning styles which could be suitable for various circumstances and situations. Honey and Mumford described four primary learning methods that are activist, observer, thinker, and practitioner. An activist is interested in developing their knowledge and discovering interesting ways to do this. They want the chance to be able to start their project(s) without understanding the implications. They described several factors to consider when selecting an educational style.

- More awareness of the influence of self-directedness on learning will be useful to both teachers and students.
- A planned matching of learning style with that of the child will positively impact their achievements, attitude, self-image, and self-confidence.
- Teachers who have specialized knowledge in the learning styles will devise appropriate learning experiences for the different learning styles. By integrating diverse teaching skills and techniques in the classroom, instruction and management becomes more successful.
- The learning-style analysis and terminology can assist an even-handed approach to instruction. The teachers are capable of teaching by using various instructional techniques, and they are flexible in their own instructional strategies.
- Teachers must continually exchange ideas about information about teaching, especially with school administration, instructional professionals, and other staff. A cooperative team approach yields better results. The learning style theory provides a fresh outlook for teachers, pupils, administrators, curriculum developers, guidance counsellors and parents. The article discusses an innovative learning process and the more profound and intense essence of leaner than known prior. It is an important starting point for the scientific method.

Peter Honey and Alan Mumford adapted Kolb's experiential learning model. First, they renamed the stages in the learning cycle to accord with managerial experiences: having an experience, reviewing the experience, concluding from the experience, and planning the next steps. Second, they aligned these stages to four learning styles named: Activist, Reflector, Theorist, Pragmatist. These four learning styles are assumed to be acquired preferences that are adaptable, either at will or through changed circumstances, rather than being fixed personality characteristics. Honey and Mumford's Learning Styles Questionnaire (LSQ) is a self-development tool and differs from Kolb's Learning Style Inventory by inviting managers to complete a checklist of work-related behaviours without directly asking managers how they learn. Having completed the self-assessment, managers are encouraged to focus on strengthening underutilized styles in order to become better equipped to learn from a wide range of everyday experiences. A MORI survey commissioned by The Campaign for Learning in 1999 found the Honey and Mumford LSQ to be the most widely used system for assessing preferred learning styles in the local government sector in the UK.

Neil Fleming's Vak/Vark Model

Neil Fleming's VARK model and inventory expanded upon earlier notions of sensory modalities such as the VAK model of Barbe and colleagues and the representational systems (VAKOG) in neuro-linguistic programming. The four sensory modalities in Fleming's model are: Visual learning, Auditory learning, Physical learning, Social learning. Multimodality (MM) is the fifth modality. While the fifth modality isn't considered one of the four learning styles, it covers those who fit equally among two or more areas, or without one frontrunner. Fleming claimed that visual learners have a preference for seeing (visual aids that represent ideas using methods other than words, such as graphs,

charts, diagrams, symbols, etc.). Subsequent neuroimaging research has suggested that visual learners convert words into images in the brain and vice versa, but some psychologists have argued that this "is not an instance of learning styles, rather, it is an instance of ability appearing as a style". Likewise, Fleming claimed that auditory learners best learn through listening (lectures, discussions, tapes, etc.), and tactile/kinesthetic learners prefer to learn via experience—moving, touching, and doing (active exploration of the world, science projects, experiments, etc.). Students can use the model and inventory to identify their preferred learning style and, it is claimed, improve their learning by focusing on the mode that benefits them the most. Fleming's model also posits two types of multimodality. This means that not everyone has one defined preferred modality of learning; some people may have a mixture that makes up their preferred learning style. There are two types of multimodality learners: VARK type one learners are able to assimilate their learning style to those around them. VARK type two learners need to receive input or output in all of their preferred styles. They will continue to work until all preferred learning areas have been met

Anthony Gregorc's Model

Anthony Gregorc and Kathleen Butler organized a model describing different learning styles rooted in the way individuals acquire and process information differently. This model posits that an individual's perceptual abilities are the foundation of his or her specific learning strengths, or learning styles. In this model, there are two perceptual qualities: concrete and abstract, and two ordering abilities: random and sequential. Concrete perceptions involve registering information through the five senses, while abstract perceptions involve the understanding of ideas, qualities, and concepts which cannot be seen. In regard to the two ordering abilities, sequential ordering involves the organization of information in a linear, logical way, and random ordering involves the organization of information in chunks and in no specific order. The model posits that both of the perceptual qualities and both of the ordering abilities are present in each individual, but some qualities and ordering abilities are more dominant within certain individuals. There are four combinations of perceptual qualities and ordering abilities based on dominance: concrete sequential, abstract random, abstract sequential, and concrete random. The model posits that individuals with different combinations learn in different ways—they have different strengths, different things make sense to them, different things are difficult for them, and they ask different questions throughout the learning process. The validity of Gregorc's model has been questioned by Thomas Reio and Albert Wiswell following experimental trials. Gregorc argues that his critics have "scientifically-limited views" and that they wrongly repudiate the "mystical elements" of "the spirit" that can only be discerned by a "subtle human instrument".

Cognitive Approaches

Anthony Grasha and Sheryl Riechmann, in 1974, formulated the Grasha-Reichmann Learning Style Scale. It was developed to analyze the attitudes of students and how they approach learning. The test was originally designed to provide teachers with insight on how to approach instructional plans for college students. Grasha's background was in cognitive processes and coping techniques. Unlike some models of cognitive styles which are relatively nonjudgmental, Grasha and Riechmann distinguish between adaptive and maladaptive styles. The names of Grasha and Riechmann's learning styles are: Avoidant, Participative, Competitive, Collaborative, Dependent, Independent. Aiming to explain why aptitude tests, school grades, and classroom performance often fail to identify real ability, Robert Sternberg listed various cognitive dimensions in his book Thinking Styles. Several other models are also often used when researching cognitive styles; some of these models are described in books that Sternberg co-edited, such as Perspectives on Thinking, Learning, and Cognitive Styles.

Nassp Model

In the 1980s, the National Association of Secondary School Principals (NASSP) formed a task force to study learning styles. The task force defined three broad categories of style—cognitive, affective, and physiological—and 31 variables, including the perceptual strengths and preferences from the VAK model of Barbe and colleagues, but also many other variables such as need for structure, types of motivation, time of day preferences, and so on. They defined a learning style as "a gestalt—not an amalgam of related characteristics but greater than any of its parts. It is a composite of internal and external operations based in neurobiology, personality, and human development and reflected in learner behavior." Cognitive styles are preferred ways of perception, organization and retention. Affective styles represent the motivational dimensions of the learning personality; each learner has a personal motivational approach. Physiological styles are bodily states or predispositions, including sex-related differences, health and nutrition, and reaction to physical surroundings, such as preferences for levels of light, sound, and temperature. According to the NASSP task force, styles are hypothetical constructs that help to explain the learning (and teaching) process. They posited that one can recognize the learning style of an individual student by observing his or her behavior. Learning has taken place only when one observes a relatively stable change in learner behavior resulting from what has been experienced.

Assessment Methods

A 2004 non-peer-reviewed literature review criticized most of the main instruments used to identify an individual's learning style. In conducting the review, Frank Coffield and his colleagues selected 13 of the most influential models of the 71 models they identified, including most of the models described in this article. They examined the theoretical origins and terms of each model, and the instrument that purported to assess individuals against the learning styles defined by the model. They analyzed the claims made by the author(s), external studies of these claims, and independent empirical evidence of the relationship between the learning style identified by the instrument and students' actual learning. Coffield's team found that none of the most popular learning style theories had been adequately validated through independent research. This means that even if the underlying theories were sound, educators are frequently unable to correctly identify the theoretically correct learning style for any given student, so the theory would end up being misapplied in practice.

Learning Style Inventory

The Learning Style Inventory (LSI) is connected with David A. Kolb's model and is used to determine a student's learning style. Previous versions of the LSI have been criticized for problems

with validity, reliability, and other issues. Version 4 of the Learning Style Inventory replaces the four learning styles of previous versions with nine new learning styles: initiating, experiencing, imagining, reflecting, analyzing, thinking, deciding, acting, and balancing. The LSI is intended to help employees or students "understand how their learning style impacts upon problem solving, teamwork, handling conflict, communication and career choice; develop more learning flexibility; find out why teams work well—or badly—together; strengthen their overall learning. A completely different Learning Styles Inventory is associated with a binary division of learning styles, developed by Richard Felder and Linda Silverman. In Felder and Silverman's model, learning styles are a balance between pairs of extremes such as: Active/Reflective, Sensing/Intuitive, Verbal/Visual, and Sequential/Global. Students receive four scores describing these balances. Like the LSI mentioned above, this inventory provides overviews and synopses for teachers.

Nassp Learning Style Profile

The NASSP Learning Style Profile (LSP) is a second-generation instrument for the diagnosis of student cognitive styles, perceptual responses, and study and instructional preferences. The LSP is a diagnostic tool intended as the basis for comprehensive style assessment with students in the sixth to twelfth grades. It was developed by the National Association of Secondary School Principals research department in conjunction with a national task force of learning style experts. The Profile was developed in four phases with initial work undertaken at the University of Vermont (cognitive elements), Ohio State University (affective elements), and St. John's University (physiological/environmental elements). Rigid validation and normative studies were conducted using factor analytic methods to ensure strong construct validity and subscale independence. The LSP contains 23 scales representing four higher order factors: cognitive styles, perceptual responses, study preferences and instructional preferences (the affective and physiological elements). The LSP scales are: analytic skill, spatial skill, discrimination skill, categorizing skill, sequential processing skill, simultaneous processing skill, memory skill, perceptual response: visual, perceptual response: auditory, perceptual response: emotive, persistence orientation, verbal risk orientation, verbal-spatial preference, manipulative preference, study time preference: early morning, study time preference: late morning, study time preference: afternoon, study time preference: evening, grouping preference, posture preference, mobility preference, sound preference, lighting preference, temperature preference.

Other methods

Other methods (usually questionnaires) used to identify learning styles include Neil Fleming's VARK Questionnaire and Jackson's Learning Styles Profiler. Many other tests have gathered popularity and various levels of credibility among students and teachers. For a teacher to use the learning styles model, the teacher has to be able to correctly match each student to a learning style. This is a generally unsuccessful exercise due to inappropriate tools. For an assessment tool to be useful, it needs to be a valid test, which is to say that it actually has to put all of the "style A" students in the "A" group, all of the "style B" students in the "B" group, and so forth. Research indicates that very few, if any, of the psychometric tests promoted in conjunction with the learning styles idea have the necessary validity to be useful in practice. Some models, such as Anthony Gregorc's Gregorc Style Delineator, are "theoretically and psychometrically flawed" and "not suitable for the assessment of individuals". Furthermore, knowing a student's learning style does not seem to have any practical value for the student. In 2019, the American Association of Anatomists published a study that investigated whether learning styles had any effect on the final outcomes of an anatomy course. The study found that even when being told they had a specific learning style, the students did not change their study habits, and those students that did use their theoretically dominant learning style had no greater success in the course; specific study strategies, unrelated to learning style, were positively correlated with final course grade.

Sprenger's Differentiation

Another scholar who believes that learning styles should have an effect on the classroom is Marilee Sprenger in Differentiation through Learning Styles and Memory. She bases her work on three premises:

1. Teachers can be learners, and learners teachers. We are all both.
2. Everyone can learn under the right circumstances.
3. Learning is fun! Make it appealing.

Sprenger details how to teach in visual, auditory, or tactile/kinesthetic ways. Methods for visual learners include ensuring that students can see words written, using pictures, and drawing timelines for events. Methods for auditory learners include repeating words aloud, small-group discussion, debates, listening to books on tape, oral reports, and oral interpretationMethods for tactile/kinesthetic learners include hands-on activities (experiments, etc.), projects, frequent breaks to allow movement, visual aids, role play, and field trips. By using a variety of teaching methods from each of these categories, teachers cater to different learning styles at once, and improve learning by challenging students to learn in different ways.

James W. Keefe and John M. Jenkins have incorporated learning style assessment as a basic component in their "personalized instruction" model of schooling. Six basic elements constitute the culture and context of personalized instruction. The cultural components—teacher role, student learning characteristics, and collegial relationships—establish the foundation of personalization and ensure that the school prizes a caring and collaborative environment. The contextual factors—interactivity, flexible scheduling, and authentic assessment—establish the structure of personalization. According to Keefe and Jenkins, cognitive and learning style analysis have a special role in the process of personalizing instruction. The assessment of student learning style, more than any other element except the teacher role, establishes the foundation for a personalized approach to schooling: for student advisement and placement, for appropriate retraining of student cognitive skills, for adaptive instructional strategy, and for the authentic evaluation of learning. Some learners respond best in instructional environments based on an analysis of their perceptual and environmental style preferences: most individualized and personalized teaching methods reflect this point of view. Other learners, however, need help to function

successfully in any learning environment. If a youngster cannot cope under conventional instruction, enhancing his cognitive skills may make successful achievement possible. Many of the student learning problems that learning style diagnosis attempts to solve relate directly to elements of the human information processing system. Processes such as attention, perception and memory, and operations such as integration and retrieval of information are internal to the system. Any hope for improving student learning necessarily involves an understanding and application of information processing theory. Learning style assessment can provide a window to understanding and managing this process. At least one study evaluating teaching styles and learning styles, however, has found that congruent groups have no significant differences in achievement from incongruent groups. Furthermore, learning style in this study varied by demography, specifically by age, suggesting a change in learning style as one gets older and acquires more experience. While significant age differences did occur, as well as no experimental manipulation of classroom assignment, the findings do call into question the aim of congruent teaching–learning styles in the classroom.

Criticism of Learning Styles

Learning style theories have been criticized by many scholars and researchers. Some psychologists and neuroscientists have questioned the scientific basis for separating out students based on learning style. According to Susan Greenfield the practice is "nonsense" from a neuroscientific point of view: "Humans have evolved to build a picture of the world through our senses working in unison, exploiting the immense interconnectivity that exists in the brain." Similarly, Christine Harrington argued that since all students are multisensory learners, educators should teach research-based general learning skills. Many educational psychologists have shown that there is little evidence for the efficacy of most learning style models, and furthermore, that the models often rest on dubious theoretical grounds According to professor of education Steven Stahl, there has been an "utter failure to find that assessing children's learning styles and matching to instructional methods has any effect on their learning." Professor of education Guy Claxton has questioned the extent that learning styles such as VARK are helpful, particularly as they can have a tendency to label children and therefore restrict learning. Similarly, psychologist Kris Vasquez pointed out a number of problems with learning styles, including the lack of empirical evidence that learning styles are useful in producing student achievement, but also her more serious concern that the use of learning styles in the classroom could lead students to develop self-limiting implicit theories about themselves that could become self-fulfilling prophecies that are harmful, rather than beneficial, to the goal of serving student diversity. Some research has shown that long-term retention can better be achieved under conditions that seem more difficult, and that teaching students only in their preferred learning style is not effective.

Psychologists Scott Lilienfeld, Barry Beyerstein, and colleagues listed as one of the "50 great myths of popular psychology" the idea that "students learn best when teaching styles are matched to their learning styles", and they summarized some relevant reasons not to believe this "myth". Coffield and his colleagues and Mark Smith are not alone in their judgements. In 2005, Demos, a UK think tank, published a report on learning styles prepared by a group chaired by David Hargreaves that included Usha Goswami from the University of Cambridge and David Wood from the University of Nottingham. The Demos report said that the evidence for learning styles was "highly variable", and that practitioners were "not by any means always frank about the evidence for their work". Cautioning against interpreting neuropsychological research as supporting the applicability of learning style theory, John Geake, Professor of Education at the UK's Oxford Brookes University, and a research collaborator with Oxford University's Centre for Functional Magnetic Resonance Imaging of the Brain, commented in 2005: "We need to take extreme care when moving from the lab to the classroom. We do remember things visually and aurally, but information isn't defined by how it was received. The work of Daniel T. Willingham, a cognitive psychologist and neuroscientist, has argued that there is not enough evidence to support a theory describing the differences in learning styles amongst students. In his 2009 book why Don't Students Like School, he claimed that a cognitive styles theory must have three features: "it should consistently attribute to a person the same style, it should show that people with different abilities think and learn differently, and it should show that people with different styles do not, on average, differ in ability". He concluded that there are no theories that have these three crucial characteristics, not necessarily implying that cognitive styles don't exist but rather stating that psychologists have been unable to "find them". In a 2008 self-published YouTube video titled "Learning Styles Don't Exist", Willingham concluded by saying: "Good teaching is good teaching and teachers don't need to adjust their teaching to individual students' learning styles."

Descriptive Analysis

Learning style is a factor in how learners learn and the root factors are explored in the article. Learning style is both a trait that shows how students think and how they choose to learn, as well as an educational technique guiding the cognition, meaning and quality of learning. Students would benefit from better learning if proper learning type measurements were considered in any teaching phase. The concept reflects on the fact that people absorb things in various ways. Learning style is characterized as distinctive and measurable behaviors that provide clues about peoples mediation skills. People teach us how their minds react to the world and, thus, how they learn through their distinctive sets of behavior. Learning styles apply to the theory of how people learn and how they learn various things. Learning style is what a student does in terms of learning, which may also refer to how a student thinks. Learning styles have various modes of absorbing knowledge. These ways of communicating differ by person, experience, physiology, culture, and age. There are several different testing approaches used to determine learning styles. Behaviorism as a hypothesis was essentially evolved by B. F. Skinner. He advocates three essential suppositions. To begin with, learning is showed by an adjustment in conduct. Second, the climate shapes conduct. Whatsmore, third, the standards of coherence (how close in time two occasions should be for a cling to be framed) and fortification (any methods for improving the probability that an occasion will be rehashed) are integral to clarifying the learning cycle. For behaviorism, learning is the procurement of new conduct. Behaviorists saw learning as a cycle in which

students structure a bunch of propensities as they react to the upgrades gave by an instructor. Learning style is seen as a stable system, and does not change over time. That is the structure that does not shift quickly and has a structural stability. It retains meaning in a permanent sense. A learners style of learning is seen as being in a state of constant transition, so the emphasis should be on learning about how it evolves. This school of thought argues that the current existence of things is a permanent feature, which cannot be changed. The environment can influence and does influence learning styles and induces or decreases major changes in them. To ensure classroom learning, some learning types are more important than intelligence. The recognition of these types should be of special importance for educators, as certain variables in classification of students which allow teachers to better match their teaching to the needs of the students. An instructor who learns how to use multiple learning types can use a range of resources and instructional strategies to adapt to different students differing needs. Learning styles assessment can provide the basis of more personalized approach advice to students motivation, classroom management, questioning, evaluation, curriculum development and assessment of students learning. Knowing student learning patterns will enhance counselor responses to students by designing methods, approaches, and services that are sensitive to student needs. The value of recognizing and differentiating students learning styles and developing curriculum and instructional resources respond specifically to specific student needs. Learning style diagnosis allows individualized training to be carried out on an evidence-based basis. It grants the power and authority to educators to evaluate, inspire and assist students. It is an innovative and new path to education. Educational researchers Eileen Carnell and Caroline Lodge concluded that learning styles are not fixed and that they are dependent on circumstance, purpose and conditions.

Conclusion

The application of learning styles leads to development of a diverse repertoire of professional behaviors. Teacher who understands learning styles intentionally use a variety of materials and methods to respond to students diverse needs. It can give us direction for changing schools and help us to find ways for every student to be successful. Knowledge of learning styles is essential in improving instructional skills, curriculum development and assessment of student learning. We know that it is possible to apply it to all area of education i.e., curriculum, instruction, leadership and counseling. Awareness and understanding of different learning styles help the teachers in becoming diagnosticians, prescribers, and educational designers which in turn facilitates the job preference of modern teacher. Understanding learning styles of student has a wide range of possible applications in education. It is not only improving the students learning but also helpful teachers to know, curriculum planner to judge and guidance worker to apply in the field of education. It gives basis of individual difference and improves the teaching learning process. Educators have started to explore the characteristic of learning styles of students that can be used for the enhancement of learning in design. Knowledge of learning style can help children to think and learn to best of their abilities, help teachers provide a variety of learning opportunities as per as the potential of the students, help administrators and policy makers to adopt appropriate curriculum strategies as per individual needs; and help educational counselors and researcher to identify the different learning styles of students.

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