

## Identification of Learning Styles in Psychology Students: Actions To Fascilitate Learning

Maria Jesús Que Valenzuela<sup>1</sup>, Daniel Antonio Muñoz González<sup>1\*</sup>

Innova University, San Francisco de Campeche, Mexico<sup>1</sup>

Corresponding author: daniel.munoz@instcamp.edu.mx

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### Abstract

Learning is a dynamic process that requires the active participation of the student, as well as the timely intervention of the teacher and the authorities of higher education institutions. In this sense. It is important to point out that identifying learning styles from the diagnostic evaluation will allow the design of actions and strategies aimed at the formulation of novel methods for adequate didactics and meaningful learning. That is why the objective of the article is to identify the learning styles in a group of students of the degree in psychology of the University Innova. In such a way, that it allows to design actions that favor the correct teaching-learning process of psychology. Finally, it is of the utmost importance that psychology academies apply these types of activities to make agreements that allow us to continue advancing in an adequate pedagogical action for the adequate didactics of psychological science.

**Keywords:** learning styles, psychology students, learning strategies.

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### I. INTRODUCTION

In general terms, educational institutions provide the student society with quality infrastructures, various innovations and different disciplinary fields performed by efficient professionals, guaranteeing educational quality by fulfilling the proposed mission and vision. The school provides through pedagogical practice the necessary tools to meet the goals and objectives set in the different school cycles, for this reason, it has curricula, educational models and plans, in order to promote and develop a correct Teaching -Learning (EA).

On the other hand, within the classrooms, two protagonists stand out, the speaker and the teacher, each with different abilities, skills and roles, creating learning environments that influence the development of academic training. Over the years, countless studies have been carried out, seeking to provide answers on how people carry out the learning process.

Claudia Castillo (2018) considers learning as a dynamic process in which the active participation of the student is required, however, in current education, the teacher plays an important role by structuring and guiding their professional work with the curricular contents, specifying the mental structures of the learners. This task is mainly the first step that the subject establishes to assimilate the new information and knowledge that he possesses, allowing the construction of new learning.

From this point of view, what is stated by Montoya (2018) is attributed to him, who points out that each student is characterized by their particularities and preferences when it comes to learning, which makes it possible to understand that, although they all share the same space and the same teacher, each student has a particular style of learning.

Given the present information, it is necessary to encourage reflection on the students' own way of learning, above all to help them analyze, organize and develop their mental structures, in order to improve the cognitive processes that they put into action and avoid school failure . In addition, learning styles are a key in cognitive improvement and academic success focused on attention, memory and certain learning.

Given this position, there is extensive information on learning styles, defined by different authors, leading to an extension of concepts and knowledge that are currently the basis for classifying them more easily, however, there are professionals who in their role of It is difficult for teachers to understand the term and provide teachings based on the different learning styles of their students.

Likewise, it is of utmost importance to conceptualize learning styles. The term "learning style" refers to the fact that when we want to learn something each of us uses our own method or set of strategies. Although the specific strategies we use vary according to what we want to learn, each of us tends to develop global preferences. That is, there are various educational preferences determined at different moments of teaching and it is not precisely to focus on developing a unique learning style in each of the class activities; highlighted that

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the term used is directly related to the conception of learning as an active process through the use of methods and strategies.

### **Learning Styles**

According to Keefe (1988) the Learning Styles are:

"Cognitive, affective and physiological traits, which serve as relatively stable indicators, of how students perceive, interact and respond to their learning environments" (p. 2).

From this scope, it is determined that the process of acquiring knowledge is based on assimilating the contents through teacher-student interaction, through the development of the different cognitive traits that arise from the present learning environment, related to the objective of the curriculum with the practice of any teaching strategy or method, setting clear and precise goals with the intention of adapting to educational needs with flexibility.

Dunn and Dunn (1978) define learning styles as:

The set of personal, biological or developmental characteristics that make a teaching method or strategy effective in some students and ineffective in others. (p.6)

It is important to note that in 2019 Velazco (as cited in Pantoja and Correa, 2013) refers to learning styles as:

"The set of biological, social, motivational and environmental characteristics that an individual develops from new or difficult information; to receive and process it, retain and accumulate it, construct concepts, categories and solve problems, which together establish their learning preferences and define their cognitive potential. (p.80)

From this point of view, there is a similarity with what the authors Dunn, Correa and Keefe think; the above implies analyzing the work of the teacher together with the learning styles, when teaching educational content, not only spreading information, but also having the ability to organize and build new learning using the correct strategies, giving meaning to what is explained based on the various characteristics that the speaker develops when faced with a task and, which implies the development of their cognitive, emotional, social and biological potential, the which will determine the best way to concretize the proposed learning effectively.

Álvarez (2015) refers that learning styles are a set of mental operations that each person uses to organize and process the information obtained, affecting educational experiences and teaching styles.

Based on the aforementioned data, different models have emerged that classify learning styles differently; according to Cazau (2004) they are classified as follows:

<b>Learning Styles</b>	<b>Characteristics</b>	<b>Author</b>
<ul style="list-style-type: none"> <li>• Visual</li> <li>• Auditory</li> <li>• Kinesthetic</li> </ul>	The three processes are closely related and one affects the other. Thus, when making the selection of information through the predominant style, be it visual, auditory or tactile, the way it is organized, processed and used will be affected.	Neurolinguistic programming contribution by Richard Bandler and John Grinder.
<ul style="list-style-type: none"> <li>• Active</li> <li>• Reflective</li> <li>• Theoretical</li> <li>• Pragmatic</li> </ul>	The survival of human beings depends on the ability to adapt and focuses on learning according to: their inheritance, previous experience and the demands of the environment where it develops.	Kolb
<ul style="list-style-type: none"> <li>• Left cortical</li> <li>• Left limbic</li> <li>• Right limbic</li> <li>• Right cortical</li> </ul>	It is determined by brain dominance. The four quadrants represent four different ways of operating, thinking, creating, learning and living with the world.	Herrmann
<ul style="list-style-type: none"> <li>• Active / reflective</li> <li>• Sensory / intuitive</li> <li>• Visual / verbal</li> <li>• Sequential / global</li> <li>• Inductive / deductive</li> </ul>	This a model that displays each category on two opposite sides and you can see the mix between other styles of other models.	Felder y Silverman
<ul style="list-style-type: none"> <li>• Environmental</li> <li>• Emotional</li> <li>• Social</li> <li>• Physiological</li> </ul>	.Environmental needs: the noise, the light, and the temperature of the space in which it is learned are specified here. Emotional needs: they contemplate motivation, mood, etc. Social needs: refer to the preference to work alone, in a group with or without the guidance of a teacher. Physiological needs: according to age, development, diet. Etc	Askev

Classification of learning styles based on different authors. Source: taken and adapted from Cazau (2004) (cited by Aragón, 2009)

Each of these models refers to different ways of learning. The teacher is the one who is in charge of providing learning actions that help the learners to solve each of the proposed activities. It is necessary to know that during classes the student must be motivated to learn and develop their skills, which will allow to create confidence in their knowledge and their learning style, favoring the student to obtain the security that allows them to recognize their difficulties in the future and face them effectively and efficiently.

Carbo, Dunn R. and Dunn K. (1997) have investigated different learning styles and have shown first, categorically, that students learn differently, and their school performance depends on being taught in one learning style that corresponds to their learning. According to these researchers, there is no learning style that is better than another, however the combination of these generates a better advantage to assimilate knowledge; There are many different approaches to specifying the teachings by using each of the learning styles, some of which are effective with certain students and others are not, so it is necessary to establish strategies that promote better teaching results based on a combination of the learning styles of the students.

As mentioned by Mariano Tapias (2018) and added to the above, it is confirmed that not all of us learn the same, or in the same harmony; Each student will learn differently, will have different doubts and will advance more in some areas than in others, despite the fact that they have all received the same explanations and done the same activities and exercises. For these reasons it is necessary to develop each of the learning styles and not a specific one; It is necessary to put into practice different strategies that benefit students to obtain more efficiently and effectively the curricular contents, related to their interests, achieving through instruction students capable of knowing their abilities and developing new strengths that allow them to fulfill the learning expected of each school year.

### **Pedagogical practice in the teaching-learning process**

The pedagogical practice at the different educational levels varies in relation to the Teaching-Learning strategies issued by teachers and the way in which students acquire learning. The National Institute for the Evaluation of Education (INEE, 2015) indicates that the strategies can be understood as a tool for meaningful learning, taking into account the importance of students' learning styles at the time of teaching, adapting to their needs.

It is important to highlight that there are teachers who carry out pedagogical practices in a deep-rooted way, that is, the teacher does not manage to structure the contents of the syllabus with efficient strategies or methods, but rather limits himself to only using conventional and unnecessary strategies, affecting the ability to intervene satisfactorily in the Teaching-Learning environment and what is experienced day by day.

The Secretary of Public Education (SEP) in 2018 suggests that pedagogical practice should emphasize the reevaluation of the role of teachers, in the review and improvement of working conditions; It is necessary to update and diversify the teaching-learning methods in order to obtain the academic success of the students.

In this sense, it is highlighted that the teacher's work is to contribute, build and promote knowledge, teaching skills required in today's world, and, above all, know how to use strategies and materials capable of promoting the development of skills and meaningful learning, seeking to improve, mainly, the professional work; For this, strategies conceived in a comprehensive way must be designed, which address different school materials and tools, up to training and incentives for teachers, in particular making investments in infrastructure, strengthening and greater commitment to students to provide quality education, as proposed by the Secretary of Public Education (2018).

In particular, Martínez, Schweig and Goldschmidt (2016) report that:

Teaching practice is inherently complex, multidimensional, dynamic, highly interdependent on temporal, social and cultural contexts and comprises a wide range of knowledge, skills, attitudes, dispositions, practices, as well as work

Outside the classroom with the students' families and colleagues, multiple measures are necessary to capture the different qualities involved in it (p.8).

The aforementioned indicates that the relevant causes that affect the meaningful learning process are multiple and complex, affecting pedagogical practice. These points of interference mentioned, arise within the school classroom, and an adequate Teaching-Learning process is required, which allows the teacher to meet the goals proposed in the educational field, consummating the education guidelines, allowing the student to learn from effective way and fulfilling at the precise moment the objective of educating citizens with capacities to search, select and interpret information.

Using this information, it is necessary to comply with the General Education Law in force (09/30/2019) that establishes the reevaluation of female and male teachers as learning professionals with a broad pedagogical vision, promoting education, and training and updating in accordance with their diagnostic evaluation, contextualized to the area where it develops its work. The foregoing strengthens the ability to make decisions in

everyday school life in all its settings. It has the mission that the students, who are currently taught, learn better and achieve an acceptable level of learning, and are not students who only memorize to pass the subject, but on the contrary that they learn to develop strategies to understand what they are taught, so that, by the end of the semester, they gain the ability to reason, analyze and be critical.

Consequently, there is agreement with what Díaz Barriga (2002) thinks, which argues that other forms of learning should be generated and, in this way, eradicate erroneous or confusing pedagogical practices through the teacher; Its primary task is to teach and use appropriate learning strategies, training strategic teachers, that is, teachers must have knowledge of the processes and types of learning, both their own and that of their students, and also plan, regulate and reflectively evaluate their teaching performance. It is necessary to recognize and comply with the exposed guidelines of their professional work with the correct decision-making, capable of intervening effectively, maintaining an institutional functioning, with professionalism and implement new strategies that benefit and focus on providing adequate teaching, in order to meet the curricular objectives.

### **Learning Styles Developed in Psychology Students**

During the school cycles, learning styles are developed based on each of the educational activities and actions, in particular with certain skills of university students; By using the skills and strategies, it is avoided that students tend to lean towards a specific learning style, however, the speaker not only develops a single style, but these are developed according to the interests and learning environments present. Since there are aspects and aspects that provide greater opportunities to ensure the success of apprentices in their professional training.

To convert teaching into knowledge, Villalobos (2003) points out that there is a combination of individual aptitudes and preferences that are manifested in the way of acquiring, processing and retaining information. The foregoing confirms that university students already know their educational interests and their way of learning, each one processing the information in a different way from the activities carried out, individually acquiring significant learning.

López, A. A. and Morales, K. A. (2015) point out that “the learning style used is the integral way by which the various experiences that surround us on a daily basis become meaningful”; As a teacher, it is necessary to integrate skills that together with the curricular content, psychology students learn to integrate learning styles, which in a personalized and autonomous way at the level they are studying, already recognize in particular which style is predominant, which is secondary and determine which style is indifferent based on the development of your skills.

Faced with this position, Zabalza (2000) considers that the learning process of apprentices involves three dimensions:

“The theoretical in itself, the tasks and actions of the student and the tasks and activities of the teachers; that is, the set of factors that can intervene on it”(p.98)

By designing different activities, the teacher increases the possibilities of promoting deeper learning in students, which is not simple memorization, but teachings that they can understand and can be used in society effectively and efficiently. Ramírez and Rojas (2007) cited by Erazo Santander, OA (January-June, 2013) indicate that the main factor used in psychology students is based on the appropriate use of study strategies and habits and, above all, the relationship that exists with learning styles, class participation, note taking, Metacognitive techniques, review and evaluation strategies, dedication to study and school discipline.

However, the aforementioned indicates that not a single resource, method or strategy is used; Since the teaching of university students is not based on developing a single learning style or method that implies falling into monotony, if it reaches that point, it would be limiting the cognitive areas and learning styles, therefore, It is necessary to analyze what are the barriers that prevent students from acquiring knowledge based on their interests so that learning is more complete.

The teacher, when offering the classes, seeks to use different strategies and tools that develop the educational areas, so that the learning is specified, assimilated and balanced, which will allow the speaker to acquire knowledge more effectively, taking into account the way in which the student receives the teaching and the way he thinks.

Therefore, it is necessary to identify which learning styles predominate in psychology students at INNOVA University, in order to improve pedagogical practice and offer an efficient and comprehensive educational quality; for these reasons, the “Learning Styles” instrument was applied from June 29 to July 6, 2021; the number of responses obtained by the students are as follows:

Pregunta	TA	A	I	D	TD
1. Entiendo mejor si el profesor da las instrucciones.	7	3	0	0	0
2. Prefiero aprender haciendo algo en clases.	8	2	0	0	0
3. Avanzo más en mis tareas si trabajo con otros.	1	6	1	2	0
4. Aprendo más cuando trabajo con mi grupo.	3	7	1	0	0
5. En clases, aprendo mejor si es con otros.	1	7	2	0	0
6. Aprendo mejor leyendo lo que el profesor anota en el	4	2	3	1	0

pizarrón.					
7. Aprendo mejor cuando alguien me dice cómo hacer algo en clases.	1	7	1	1	0
8. Cuando construyo algo en clases aprendo mejor.	4	6	0	0	0
9. Aprendo mejor cuando escucho la información en clases, que cuando leo.	2	4	3	1	0
10. Cuando leo instrucciones las recuerdo mejor.	2	7	1	0	0
11. Aprendo mejor si puedo hacer una maqueta de algo.	1	8	1	0	0
12. Entiendo mejor cuando leo instrucciones.	2	7	1	0	0
13. Recuerdo mejor las cosas cuando estudio solo.	3	3	4	0	0
14. Aprendo más cuando desarrollo un trabajo para la clase.	4	5	1	0	0
15. Disfruto aprender por medio de experimentos.	4	6	0	0	0
16. Aprendo mejor si hago dibujo de lo que voy estudiando.	4	4	1	1	0
17. Aprendo mejor si el profesor da su catedra exponiendo.	4	6	0	0	0
18. Cuando trabajo solo aprendo mejor.	1	6	2	1	0
19. Entiendo mejor las cosas en clases si participo en juego de roles.	4	6	1	0	0
20. Aprendo mejor en clases si escucho a alguien.	1	8	1	0	0
21. Disfruto hacer las tareas con dos o tres compañeros.	4	5	0	1	0
22. Cuando construyo algo, recuerdo mejor lo que aprendí.	6	4	0	0	0
23. Prefiero estudiar con otros.	1	7	1	0	1
24. Aprendo mejor cuando leo, que cuando escucho a alguien.	1	4	4	1	0
25. Disfruto hacer algo para un trabajo de clases.	5	5	0	0	0
26. Obtengo mejor provecho de las clases si participo en actividades afines al tema tratado.	2	6	2	0	0
27. En clases trabajo mejor si trabajo solo.	0	5	4	0	1
28. Prefiero hacer mis trabajos solo.	0	6	1	1	2
29. Aprendo mejor leyendo libros que escuchado exposiciones orales.	0	3	2	3	2
30. Prefiero hacer mis trabajos por mí mismo.	2	5	3	0	0

General results of the number of responses to the Learning Styles instrument applied to Psychology students at INNOVA University. Own source (2021).

## II. RESULTS

The instrument used to determine the learning style of university students consists of 30 items and they evaluate the three learning styles proposed by Richard Bandler and John Grinder: Visual, Auditory and Kinesthetic. In the results reflected in the previous table, it is perceived that the learning styles of each student of the degree in Psychology varies according to the different strategies used in EE, and although each participant may have one of the four to a greater extent Styles analyzed, the general tendency to choose the kinesthetic learning style is observed, this characteristic being statistically significant.

In a determined way, the third-semester students of the degree in Psychology at INNOVA university, through the responses selected in the instrument, are totally in agreement that, mostly, they learn when they build something in class in relation to the subject or through experiments and better understand the teachings, if they are in constant participation or role-playing, getting better use of the classes and activities related to the topic.

Based on the items, the secondary learning style is auditory; The students state that, in their professional training, together with their skills, learning is more feasible, if the teacher gives the instructions, when they listen to their classmates present the topic and indicate how to do something in class, which allows the teacher to plan activities of Teaching-Learning with appropriate strategies for students to achieve each of the challenges proposed in class.

However, unlike the dominant and secondary style, on average five out of ten students indicate that they learn better by reading what the teacher writes on the blackboard, they understand the instructions better and, thus, it is easier to remember them, demonstrating that the style of indifferent learning is visual. Likewise, it is taken into account that students refer that they learn better if the educational contents are carried out through group activities, that is, by teams, confirming that 43% of students choose to develop their kinesthetic learning style if it is in collaboration with their peers, revealing that in most of the time, only 35% of the students confirm that they carry out activities individually.

In order to improve pedagogical practice, the following Teaching-Learning strategies are proposed to enhance the Kinesthetic Learning Style and develop the Visual Learning Style, proposed by the authors Díaz Barriga and Hernández (2010) and Pallarés, Alava and Sallán (2017).

Strategies for the improvement of Pedagogical Practice	
Kinesthetic Learning Style	Visual Learning Style
Learning focused on solving authentic problems.	Use of ICT (video, audio, photography, internet, computer)

<ul style="list-style-type: none"><li>• Case analysis.</li><li>• Projects.</li><li>• Practices situated or learning in situ in real settings.</li><li>• Play educational games based on the topic.</li><li>• Relate stories based on the content and make a sketch.</li><li>• Collage.</li><li>• Preparation of teaching materials.</li><li>• Frequent use of graphic organizers.</li><li>• Models and experiments.</li><li>• Portfolios of evidence.</li></ul>	<p>applications, etc.) to carry out tasks.</p> <ul style="list-style-type: none"><li>• Preparation of documentaries.</li><li>• Educational lottery based on content.</li><li>• Preparation of worksheets.</li><li>• Make summaries, summary tables, essays, comparative table.</li><li>• Elaboration of concepts with word play.</li><li>• Memorama.</li><li>• Mind map.</li><li>• Blogs</li><li>• Field study.</li></ul> <p>Reading club.</p>
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Strategies for pedagogical improvement in students with kinesthetic and visual learning styles (2021). Finally, both teachers and students must reinforce their learning styles and use the strategies accurately, since the possibilities of achieving much more effective learning are great.

### III. CONCLUSION

Transcending teaching is a job that requires a lot of responsibility, dedication, vocation, productivity and efficiency; Teaching allows the teacher to generate in his students a different way of perceiving, defining and acquiring knowledge. There are many ways to absorb learning, in this case, the main function is to get the speakers to develop their learning styles and not to lean on just one; When referring to the term "Learning Styles" Jessica Trujillo (2017) alludes that:

Each person can use a particular method or a specific strategy that makes it easier for them to understand any topic. Although the strategies are varied according to the topic of what you want to learn, each individual tends to develop certain preferences or tendencies that contribute to the definition of the learning style. (p. 3)

Derived from the above and through the results obtained, it seeks to implement strategies to improve pedagogical practice, which guarantee that future Psychologists carry out their professional work with full validity. It is necessary to remember that psychology is a profession that requires constant updates, activities and skills, thus, it is important that students maintain a balance in their learning styles and not limit themselves to developing activities in a single style.

In summary, the results determine that 45% of the psychology students at INNOVA University are inclined to develop the Kinesthetic learning style in most classes. As a secondary learning style is the Auditory one, noting that 41% of the students tend to carry out activities, where the teacher with their pedagogical practice proposes different actions that allow them to develop the capacity for understanding and self-learning, through oral explanations or explaining that information to someone else. Likewise, within the analysis, the students indicate that only 36% of the time they develop the visual style when carrying out the corresponding activities, due to the difficulty in assimilating the learning, demonstrating their indifference to this style.

Alonso, Gallego and Honey (1997) point out that "the student's knowledge and understanding of his learning style will allow him to be aware of the cognitive strategies he uses and which ones are the most appropriate in his case." Cachay (2015) that students with different learning styles understand educational problems according to their cognitive channel and seek to solve it in different ways, according to their style and abilities.

### IV. RECOMMENDATIONS

Through the results obtained, there is the responsibility of improving pedagogical practice, with the appropriate tools, methods and strategies that together with the abilities, skills and opportunities of the students, it is possible to maintain a balance of learning styles, in the face of this perspective, the work must be assumed by the management personnel, in conjunction with the pedagogues, psychologists and teachers of the educational institution, same who, in exercise of their functions, must provide educational services, taking the appropriate actions to develop different methods of Teaching-Learning in virtual environments.

As part of the intervention, they propose to propose strategies that lead to more complete classes, through the formulation of activities that favor the kinesthetic and visual learning style. Because the knowledge and understanding of the students' learning styles by the teacher, as indicated by Monereo and Pozo (2003), "will be what will facilitate the fundamental academic decision-making and the orientation of the student to identify possible deficiencies and difficulties, thus allowing him to improve his performance".

Teaching-learning strategies as indicated by Cerezo (2015) "are instruments that teachers use to strengthen the development of students' competencies, based on a didactic sequence that includes beginning, development and closure, being used permanently and taking into account the abilities and skills that are intended to be developed".

It is important to highlight that opening a range of opportunities to teachers, to base the design of methodological, innovative strategies that meet the needs and realities of students, is a process of search and construction of knowledge, to raise the level of academic performance, so that in this way it is achieved that the processes are much more effective, relevant, creative and innovative from the point of view of educational practice (Paz, 2019).

Finally, through the results obtained, teachers will have the ability to recognize the learning profile of students, which will allow them to adapt to their learning styles and, likewise, capture actions to enrich the educational process in a precise way. , above all that facilitates the consolidation and development of activities that allow students to learn according to their dominant learning style, as well as develop the less dominant style and, likewise, contribute to the fact that learners can overcome the barriers that limit their learning, preventing in the future, educational lag or school failure.

For this reason, vocational training must be in accordance with the needs of a changing society; It is necessary for the teacher to provide the best tools to their students, so that upon graduation they become successful professionals, capable of effectively fulfilling their professional work. Therefore, it is necessary to propose that students carry out academic activities aimed at reinforcing the visual learning style, with strategies that manage to develop new skills, linking with their field of work, managing to retain most of the knowledge and associate them in such a way that are useful to them.

## REFERENCES

- [1]. Alonso, C. Gallego, D. y Honey, P. (1997). LOS ESTILOS DE APRENDIZAJE, PROCEDIMIENTO DE DIAGNÓSTICO Y MEJORA. Bilbao, España: Ediciones Mensajero.
- [2]. Cachay, S. (2015). ESTILOS DE APRENDIZAJE Y RENDIMIENTO ACADÉMICO EN ESTUDIANTES DE LA ESCUELA PROFESIONAL DE ADMINISTRACIÓN DE LA UNIVERSIDAD PERUANA UNIÓN. Revista de Investigación Valor Agregado.
- [3]. Cazau, P. (2004). ESTILOS DE APRENDIZAJE: GENERALIDADES. Recuperado de <http://cursa.ihmc.us/rid=1R440PDZR-13G3T80-2W50/4.%20Pautas-paraevaluarEstilos-de-Aprendizajes.pdf>
- [4]. Cerezo, M., Casanova, P., De la Torre, M. y De la Villa, M. (2015). ESTILOS EDUCATIVOS PATERNOS Y ESTRATEGIAS DE APRENDIZAJE EN ALUMNOS DE EDUCACIÓN SECUNDARIA. European Journal of Education and Psychology, 4.
- [5]. Claudia Castillo P. (2018). ESTRATEGIAS DE APRENDIZAJE EN EL NIVEL MEDIO SUPERIOR Y DE INNOVACIÓN EN EL SUPERIOR. Xalapa, Veracruz.
- [6]. Díaz Barriga F, y Hernández G, (2002), ESTRATEGIAS DOCENTES PARA UN APRENDIZAJE SIGNIFICATIVO, UNA INTERPRETACIÓN CONSTRUCTIVISTA. Segunda edición México. McGraw Hill.
- [7]. Díaz Barriga, F. y Hernández Rojas, G. (2010). ESTRATEGIAS DOCENTES PARA UN APRENDIZAJE SIGNIFICATIVO. 3a. Edición. México: Mac Graw Hill.
- [8]. Dunn, R., Dunn, K. (1978). Teaching Students through their Individual Learning Styles: A practical approach. New Jersey: Prentice Hall. P.6
- [9]. Erazo Santander, O. A. (enero-junio, 2013). CARACTERIZACIÓN PSICOLÓGICA DEL ESTUDIANTE Y SU RENDIMIENTO ACADÉMICO. Revista Colombiana de Ciencias Sociales. Vol. 4. No. Medellín-Colombia.
- [10]. Gobierno de Panamá, 2005. Documentos desarrollados para capacitación profesional como parte del Plan Nacional de Inclusión Educativa en 65 centros pilotos del país.
- [11]. Jessica Trujillo. (2017) PROYECTO DE INTERVENCIÓN: ESTRATEGIAS DE ENSEÑANZA PARA IMPLEMENTAR SEGÚN ESTILOS DE APRENDIZAJE DE LOS ALUMNOS. Pachuca, Hidalgo.P.3.
- [12]. Keefe, J. (1988). Profiling and Utilizing Learning Styles. Reston Virginia, USA: National Association of Secondary School Principals. P.2
- [13]. Lesli Arena Fuentes. INSTRUMENTO ESTILO DE APRENDIZAJE. Formato Disponible en línea desde [es.scribd.com](https://es.scribd.com). consultado el 26 de junio de 2021.
- [14]. López Bañuelos, Adriana Aurora; Morales Márquez, Karla Anahí. ESTILOS DE APRENDIZAJE Y SU TRANSFORMACIÓN A LO LARGO DE LA TRAYECTORIA ESCOLAR. Enseñanza e Investigación en Psicología, vol. 20, núm. 1, enero-abril, 2015, pp. 36-47 Consejo Nacional para la Enseñanza en Investigación en Psicología A.C. Xalapa, México. Recuperado de <http://www.redalyc.org/articulo.oa?id=29242798007>
- [15]. Mariano G. Tapias (2018). ESTILOS DE APRENDIZAJE, ESTRATEGIAS PARA ENSEÑAR. SU RELACIÓN CON EL DESARROLLO EMOCIONAL Y “APRENDER A APRENDER”. Universidad de Valladolid, España. Tendencias pedagógicas n°31.
- [16]. Martínez, J., Schweig, J., y Goldschmidt, P. (2016). Approaches for Combining Multiple Measures of Teacher Performance: Reliability, Validity and Implications for Evaluation Policy. Educational Evaluation and Policy Analysis.p.8.
- [17]. Monereo, C. y Pozo, J. (2003). LA CULTURA EDUCATIVA EN LA UNIVERSIDAD: NUEVOS RETOS PARA PROFESORES Y ALUMNOS. La universidad ante la nueva cultura educativa. Enseñar y aprender para la autonomía. pp. 15-30.
- [18]. Montoya, L. (2018). ANÁLISIS CUANTITATIVO DE ESTILOS DE APRENDIZAJE Y SATISFACCIÓN EN CONTEXTOS DE APRENDIZAJE BASADO EN PROYECTOS DE ACCESIBILIDAD. Campus Virtuales.
- [19]. Pallarés, C., De Alava, M. y Sallán, J. (2017). ¿CÓMO APRENDE EL PROFESORADO UNIVERSITARIO ESPAÑOL? Comprendiendo el uso de estrategias de aprendizaje. Revista de educación.
- [20]. Pantoja, M. Duque, L. Correa, J. (2013). MODELOS DE ESTILOS DE APRENDIZAJE: una actualización para su revisión y análisis. Redalyc.org. Revista colombiana de educación, p. 80 Recuperado de <http://www.redalyc.org/pdf/4136/413634076004.pdf>
- [21]. Paz, C., Acosta, M., Bustamante, R. y Paz, C. (2019). NEURODIDÁCTICA VS. NEURODIDÁCTICA EN LA EVOLUCIÓN ACADÉMICA EN LA EDUCACIÓN SUPERIOR. Revista: Didáctica y Educación. Pp. 207-228.
- [22]. Práctica docente en educación básica y media superior. ANÁLISIS DE AUTORREPORTES DE LA EVALUACIÓN DEL DESEMPEÑO 2015. Primera edición, 2019. Ciudad de México.
- [23]. Secretaría de Educación Pública. (2018). EVALUACIÓN DEL DESEMPEÑO DEL PERSONAL CON FUNCIONES DE COORDINACIÓN NACIONAL DEL SERVICIO PROFESIONAL DOCENTE.

- [24]. SEP (2019). LÍNEAS DE POLÍTICA PÚBLICA PARA LA EDUCACIÓN MEDIA SUPERIOR. Ley General de Educación vigente. Acuerdos Secretariales. Obtenido de [http://www.sems.gob.mx/es\\_mx/sems/acuerdo\\_secretaria](http://www.sems.gob.mx/es_mx/sems/acuerdo_secretaria).
- [25]. Villalobos, E. (2003). EDUCACIÓN Y ESTILOS DE APRENDIZAJE-ENSEÑANZA. México: Publicaciones Cruz y Universidad Panamericana.
- [26]. Zabalza, M. (2000). EL PAPEL DE LOS DEPARTAMENTOS UNIVERSITARIOS EN LA MEJORA DE LA CALIDAD DE LA DOCENCIA. En Revista Interuniversitaria de Formación del Profesorado. P.98.

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