Virtual Didactics: Empathetic Communication Guided By The Teacher Allowing Knowledge And Learning By The Student

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Summary

Virtuality nowadays becomes opportunities, where teachers present constant challenges in the teaching and learning processes, the influence of digital technologies are preponderant allowing to reduce inequality when building knowledge. In the digital era, the theory of learning is based on connectivity and the teacher's teaching didactics, highlighting that in this postmodernist era we have a digital society that is articulated with the network. The pandemic caused a whole international generation to come to a standstill, but allowed technological advances in education using virtual media, with scenarios converted into teleworking - remote virtuality, generating empathy between teachers and students as both were facing the same situation. This allows this research to be based on a theoretical construct of virtual didactics: empathetic communication guided by the teacher allowing knowledge and learning by the student of the Educational Institutions of Vocational Training in the Santandereana region, supported by the interpretative paradigm, phenomenological method. The collection of the information was obtained by means of interviews, centred on the steps of categorisation, structuring, contrasting and theorisation of Martínez. The findings focused on highlighting the importance of teachers and their role, methodology, techniques and virtual didactics, as well as the importance of digital literacy for teachers to improve their teaching and learning processes.

Keywords: knowledge construction, didactics, teacher - students, virtuality.

1. Introduction

The construction of knowledge as a psychological process allows us to have an understanding of knowledge and when it is united with the direct experience of an event called object, it allows us to understand that the human being is the one who reasons and who perceives. The epistemological construction represents a description between the object of study and the subject; which implies that science allows to discover, to experiment, to interpret, diverse subjectivities in scenarios of investigative application, which leads to conclude diverse particularities, with plurality of approaches that lead to the current interpretation of the object of study in different pluralities of science.

Undoubtedly, talking about ICT, Information and Communication Technologies, leads us to think about several questions regarding: Do ICT contribute to knowledge, what does virtual teaching represent for the teacher, what would virtual teaching produce in the student, will it be important for the teacher to be trained in a new virtual language of the digital era, how does the student perceive the teacher's virtual teaching? From the viewpoint contrasted by (Edmund Husserl, 1924, p.18), in his contributions to phenomenology in which it is interpreted that the human being is unique and unrepeatable, aware of his existence and that he understands that one day he will die, in addition his being makes him responsible for his life, freedom, building his path and gives meaning to his existence.

From another perspective, ICTs have produced an exchange of knowledge and information in society, allowing opportunities for interaction and leading to a transformation of economies in various sectors. In this context, Covid 19 allowed an acceleration in education, evolving socially, creating new academic spaces and new challenges, leading to the fact that it must be rethought from its curricular designs as well as in the development of the same, associating them to the learning results of the vocational training programmes.

At present, every cybernetic space is an opportunity that, if used well, allows the production of realities that lead to knowledge; for some it will be a challenge, as it requires a change of attitude, mentality and the desire to become virtually literate; it is also necessary to recognise whether virtuality allows the reduction of social and labour inequality in urban and rural societies, or whether it produces more gaps that do not allow for the construction of knowledge.

For (Siemens, 2006, p.8), founder of the theory of connectivism, highlights that this theory of learning is particular, the digital era is a way of learning through the network, based on connectivity which integrates principles articulated by various theories such as chaos, complexity, networks and self-realisation, and that in current times are of great influence for learning and teaching by teachers.

In this sense Siemens invites that connectivity in the way of teaching is no longer an individual exercise but can be converted through virtual didactics - education through networks, learning in a new way where both the subject and the object find a way of adaptation, leaving the traditionalist format of the academy, but to cement the knowledge in co-creation networks

where the teacher and student can design their own content and take advantage of an educational way the existing content by different platforms, in this way it is a significant opening to virtual didactics in education.

Therefore, in the work of teaching and learning, it must be taken into account that to provide knowledge is not only achieved with the good attitude and willingness of both the sender and the receiver, it must also be composed of a variety of actors involved that make it possible to adopt the virtual strategy that is contemplated, for that learning environments are needed with virtual spaces where there is connectivity, light, power plant as a contingency, competent digital teachers, and others.

The pandemic allowed the world to face a number of situations, in education it made the importance of the teacher as an actor of accompaniment so notorious, so relevant its disposition and responsibility that allowed regulating the most integral professional training in the virtuality where the process was not only academic but in soft skills.

Thus, it is clear that professional training in educational institutions in Colombia should strengthen the disciplinary knowledge of teachers according to the educational structure focused on curricular designs or course plans, which guarantees quality in each training programme, allowing teachers to have digital skills that guarantee the transformation of their knowledge into scientific knowledge structured in a virtual didactic and soft skills, which means that the teacher is a sensitive human being who interacts with their students and knows their circumstances and life projects to act in favour of others without any exclusion whatsoever.

For the author, (Pérez, 2023, p.4) highlights the importance of the virtual educator, wanting to manifest that he is a being that transforms through his knowledge and the new technologies are a challenge for the teachers of the time since the change of paradigm is very complex being that it is necessary to interpret and understand that the teacher must be sensitive with human quality standing out for being an actor full of professionalism, values and aptitudes that teaches with intellectual vocation, facilitator that teaches with commitment, love, joy, leaving a mark in each one of his students.

This means that ICT has advanced to gigantic proportions and hard skills have conquered the world, and yet the teacher still has an important role to play in professional training, since soft skills can only be generated through a human being who feels and is full of a cumulus of emotions, which allows him/her to mentor the student in the world of life.

In the learning theory or developmental theory of (Jean Piaget, 2012, p.26), the author considers that the human being is a unique individual being that possesses its own characteristics and all this to the genetic science that can know the world through the senses.

Pedagogy is an important factor in teaching and educational practice, which allows teachers to channel their disciplinary knowledge to develop intelligence, through methodologies that allow questioning in research and students to build their own knowledge through interaction with the teacher as a mediator and the environment that surrounds them to face the world of life.

This means that the traditional design of education in teaching and learning processes for virtuality must generate a new model, as this space is totally different from face-to-face education, where it must be perfected, no longer a cold and distant orientation that only complies with institutional indicators, The student becomes the protagonist and virtuality a channel of approach, productivity, effective and humane allowing the exchange of knowledge, communication, since education must be bidirectional without schemes, the teacher must make himself understood through virtual didactics, creating a pleasant and friendly environment for his students.

2. Objectives
General Objective
To generate a theoretical construct of virtual didactics: empathic communication guided by the teacher allowing the knowledge and learning by the student of the Educational Institutions of Vocational Training in the Santander region.

Specific Objectives
- To interpret the categories of the theoretical construct of the digital inclusion of the integral professional training of instructors and apprentices in the learning and teaching processes, in order to relate them to the virtual didactics of the subjects of the Vocational Training Educational Institutions through the meanings revealed in the research.
- To unveil the conceptions that teachers and students of the VET Educational Institutions have about virtual didactics: empathic communication guided by the teacher allowing knowledge and learning by the student.
- To derive theoretical constructs on the importance of virtual didactics: empathic communication guided by the teacher enabling knowledge and learning by the student in the Vocational Training Educational Institutions in the Santander region.

3. Methodology
The mode procedure for science, represents the development, complexity and transdiciplinaria about the object of study. For (Buitrago, 2009, p.71) states that science is all that knowledge that is acquired through research or praxis, which are built through laws and principles that allow deduce to reason and understand. This leads us to understand that in science there is a basis for generating theory and this research describes it: The importance of virtual didactics: empathetic communication guided by the teacher allowing knowledge and learning by the student in the Educational Institutions of Vocational Training in the Santandereana region.

The researcher can also articulate and redesign the research findings as mentioned by (Piñero, Rivera and Esteban, 2019, p.84), where the authors mention that the process is constructive-interpretative of the studied reality. In such a way that, the research is based on the interpretative paradigm, promoting the subjective meaning that integrates the social relationship.

The epistemological approach represents the science of knowledge, where the research focuses on the introspective experiential approach, building knowledge from subjectivity, as mentioned by (Padrón, 2014, p.52), the introspective experiential approach, called socio historicist, hermeneutic, which the researcher approaches the social and human reality,

which allows this dialectical vision to interpret the findings for through the same knowledge, the conformation of various elements of the field where the subjects of the research interact.

The phenomenological design of the research focuses on the stages mentioned by Martínez (Ob.cit), which is composed of the Descriptive; Structural; Discussion of the results; Contrasting and Theorisation, which allows the phenomenological methodology in its intellectual production, the object of study corresponds to the objective of the research and is consistent with the findings for its final theorisation, as well as highlighting that the contrasting and theorising stages stand out for their analysis and interpretation of the results.

The selection of the sample is done in a qualitative way, the criteria that justify the selection of the sample are based on theoretical or conceptual justifications where the key informant is the one that feeds the research. It should be emphasised that the research will not talk about quantities, but about the quality of the information collected and originating from the social actors. Their selection results from the truth

In such a way that, for its selection, it is taken into account the truth of the virtuality in these times of coronavirus, where the use of some computer elements to carry out the interview, the captivating and sympathetic communication, the time established and destined for the collection of the information, on the other hand synonyms are established to protect the identity and to generate confidence.

The Techniques and Instruments for the Collection of Information: for the fieldwork the technique of the in-depth interview is used as mentioned (Strauss and Corbin, 2002, p. 45), the meetings are face to face between the researcher and the informants, to understand the approach of the informants about their lives, experiences or situations, the interview counted with the virtual platform Google Meet adapted to achieve the interaction with the interviewees.

Reliability of information: This allows for reliability in qualitative research by enabling the researcher, through in-depth conversations with the research subjects, to gather information that produces findings as a true approximation of what each of the key informants thinks and feels.

To achieve this, the research used triangulation as a technique in qualitative research, essential to reduce inconsistencies of credibility and in order to reinterpret the phenomenon under study. The author (Corral, 2014, p.37) mentions that this theoretical triangulation technique has benefits for the research such as interpreting and giving structure to the data collected, analysing the information from a variety of theoretical perspectives, allowing the researcher to be closer to the reality studied.

Techniques of information analysis: These are considered as the investigative process that considers an organisation for the interpretation of the information, applying procedures of the method, categorisation, structuring, triangulation and theorisation, allowing the success of the investigation.

4. Development of the Research

The development of education in teaching processes mediated by virtual environments can be called Virtual Didactics, since through it we can build different knowledge in an intelligent way, which allows the development of a variety of digital strategies such as the use of artificial intelligence, currently there are a great variety of apps designed for its application, some of them are: ChatGPT, ChatPDF, Bord, PDF AI, Perplexity, Humata, Youtube Summary, Ask your PDF, ProPromot, Yatter, Snack prompt; Canva, Tome, Slides AI, Flair, Simplified, Rando face generator, Bing image creator, HeyGen, Stable diffusion, Padlet, HeyGen, Monstermash, Animated drawings; Remove blacground, Cutout pro, AI Image enlarger: Text tools: Grammarly, Copy, Quillbot, Writesonic, Speechify, TTSMaler, Glasp, Murf, Deepl; Genal. ly, Mentimeter, Google Escolar, Guidde, Curipod, Scribe, SciSpace Capilot, Conker, Monic.ai, Questionwell, Formative, Parlay, Selecext, Educaplay, Flippity; Work and productivity: GPT Genie, Speechnotes, Looka, Krisp, ChartGPT, among others, designed to support the teaching and learning processes of educational actors.

In other words, the teacher must build virtual didactic spaces, also that the educational training environment is friendly, a space for bilateral interaction, which is built through their class content or sharing experiences and common knowledge through the various tools offered by ICT for the development of content and their respective evaluations.

Virtual didactics is conceived by the writer, (Jaramillo, 2005, p.3) as any act of pedagogical encounter in a meeting place where different problems are presented and from there a variety of situations are derived that build knowledge, producing with this interaction knowledge, praxis, social relations; nowadays students are in a totally digitalised world which makes it necessary to intensify the processes of innovation when teaching, where pedagogical knowledge strengthened in disciplinary knowledge, diversifies technological knowledge for optimum performance.

Undoubtedly, in order to carry out didactics mediated by ICTs, a dynamic structural process is required that makes an educational methodology possible, allowing participants to develop responsibly, regardless of their local location where they live.

This requires classes to be arranged in accordance with the academic activities programmed by the teacher and that commitments external to the student's educational commitments are not an impediment to receiving the training. In relation to this, the following category aims to reveal the impressions of the social actors who, through their experiences, make it possible to understand the reality of teaching strategies, the skilled resources for learning through the digital medium, delimiting the mastery of digital competences that make teaching and learning possible and effective.

The author's research on virtual didactics will be discussed below.

4.1. Pedagogical Knowledge, category: Virtual Didactics, subcategory: Teaching Strategies

In their training, teachers must contemplate pedagogical strategies that, in accordance with the curricular content and methodological structure, allow them to develop alphabetically in the virtual world so that their teaching is more productive and effective, achieving the permanent attention of their students. With regard to strategies, (Acosta, 2012, quoted by Murillo

2020), considers that educational strategies are an approach of aids that facilitate the student's educational performance and the in-depth processing of information from those resources used by the teacher who teaches to achieve meaningful learning. Sincerely, strategies coexist in great diversity to support processes in content creation, education and training, text tools, content editing, work and productivity. Chatbots, among others, which provide strengths and which in turn aim to systematise their contents, these strategies provide roadmaps that both teachers and students can follow, in order to have a meaningful interaction and achieve pedagogical development.

In synthesis, the academic load of the educational actors must be developed jointly, executed bilaterally by those involved in educational training, therefore in this section the contributions of the informants are recorded, who express their experiences, in correlation to the theoretical perspectives that will help to understand, The technical and specialised notion of the teacher will allow us to see if there is digital competence relevant to the development of the learning activities and if their didactics contribute significantly to the teaching in three moments of the training, beginning, development and farewell or closing of the meeting.

In this way, the informants establish their opinion regarding the development of educational strategies for teaching mediated by ICT as a digital resource. With regard to the question 'What virtual didactics do you use for your teaching', the informant IN001 mentions that:

Problem-based learning is to take the theory that comes in the support material and that is where they test their knowledge, applying it to the case study, so problem-based learning, and that is the beauty of it, that in the synchronous meeting we read the case, everyone gives their opinion and we reach a common agreement to see what they are oriented towards, Logically, there are people with a lot of preparation and there are others who are starting from scratch, so the synchronous meeting also becomes, as in this collaborative space, so that those who do not have that experience can learn from others and man, what a good tool.

Also, as for what resources do you consider to be the most appropriate for the development of your classes, your answer is as follows:

As far as resources are concerned, there are many, right now, many people are looking for what they are for and to do online activities such as didactic activities and that with a button, you get points and some of them participate in the weekly lecture so that they don't get bored, so that makes learning much more attractive.

Certainly for the informant IN001, his attitude has allowed him to look for strategies that take away from the monotony and daily routine of the teacher who talks for 1 or 2 hours to his students without interaction and possibly absent, being that many of them leave their computer tool active but are not there; here we observe a teacher who likes to share videos, audios, images that allow an exchange of questions regardless of whether their answer is the right one, the effort, participation and opinion of the student is valued.

The constant use of case solving allows the subject to face problematic situations which allow him/her to introduce and provide solutions, motivating him/her to debate, interact in class and interactions between participants and teachers. The informant IN003, comments for the development of his classes:

Exactly in that sense I have been surprised that they know other ICT tools that I don't know, they explain to me how it works, they show me that it is much easier for them to carry out an activity with that tool, so I am open to them using the tool that facilitates their training process.

This has allowed two-way learning to take place in class where the teacher becomes the student and vice versa, enabling socialisation, growing empathy, knowledge and meaningful learning.

On the other hand:

...According to the strategies you apply, how do you describe the learning style of the students, what do you consider: That there are many strategies and as well as there are I do not know them either, only some, but for me the most important thing is to gain the trust of the students, after one gains their trust, I have seen cases of students who have been very reluctant to participate in the programmes and who have been about to withdraw and I have made them change their mentality and continue already more motivated in the training process, then for me everything is based on trust and respect.

Although there are currently a variety of strategies that support virtual didactics, it is important to highlight the value of trust and respect among the participants of the classes, as this generates permanence to return and continue growing and above all motivation, as described by the informant.

Although some strategies deteriorate the ordinary and ambiguous didactics, the informant AP005 to the question 'Do the activities that the teacher uses help to motivate the class?', which he considers to be:

¿The games? games especially, are great, they allow us to share, compete without going outside the subject of the classes and the subject or the competition, it makes us concentrate, the class becomes creative, interactive and fun, in other words, they are activities where we can all share, many times in these activities, we can meet and get to know each other better with other classmates with whom we are.

This means that the use of strategies described by the informant allows for different schemes and, above all, achieves the active participation of the participants, which means that the teacher is able to take in appreciations, reflections and even to unlearn what he or she has mistakenly learnt, acting on the response of his or her students.

This means that the use of strategies described by the informant allows different schemes and, above all, achieves the active participation of the assistants, which means that the teacher is taking appreciations, reflections and even unlearning what he/she erroneously learned, acting on the response of his/her students.

Finally, (Murillo, Ob. cit.) defines teaching strategies as comprising all didactic action of the teacher supported by the curricular contents, which have contents allowing the organisation, structuring and interrelation, to maintain the motivation and attention of the student, supported by a series of techniques that allow meaningful learning by means of problem solving.

Graph 1. *Teaching strategies. SPA Pérez (2023).*
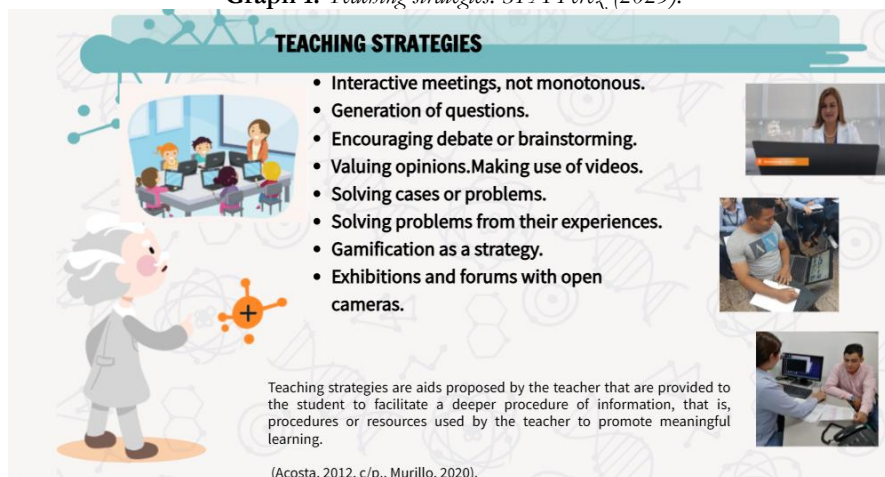
Note: Own

5. Conclusions

In summary, the pedagogical knowledge of the teaching action through Virtual Didactics, by means of Teaching Strategies, presides over the educational dynamics, as described by the contributions of the social actors.

The fact of being in a virtual world does not indicate that the teacher should be absent and cold as virtuality, but should be a dynamic actor and a human being who is interested in his students, understanding that each one of them lives a different situation and that each time he attends class is an opportunity to transmit not only knowledge but also its importance in the world of life.

Teachers need to understand that today's education is a digitalised education where the students who attend classes are students of the digital era, therefore a change of mentality is needed, to stop being resistant to change and to give themselves the opportunity to learn in order to teach, and also to become students of their own students, as they are immersed in the world of research and are permanent connoisseurs of the current and the modern.

It must be understood that virtual training is not the same as face-to-face training, therefore the curricular designs or study plans and their structural organisation must be oriented towards this type of digital student.

Providing computer-mediated attention does not mean that the human condition of the teacher is abolished, but it does make him or her more sensitive, where camaraderie is already part of this bilateral communication.

In the virtual world, times are fast, which is why it is important to resize meetings, to establish class times and attention times. The change in the paradigm of the teacher allows for permanent growth in the virtual world, as this means that the teacher no longer uses a monologue to follow but must be a strategist and digitally competent when it comes to training in their classes.

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