Emerging Research

Virtual Learning Communities: A Practical Way to Train Teachers

Benjamín Rodríguez Castillo, Universidad Pedagógica Nacional Unidad 151 Toluca

This article presents a proposal aimed at conceiving a different model of attention to and characterization of teachers during their formative process and in their pedagogical practice in correspondence with the new 21st-century educational paradigms. The learning community refers to a project based on a set of successful educational actions that were aimed at social and educational transformation (Elboj & Oliver, 2003). That is, it refers to the educational model that is in line with theories highlighting the key factors for learning, both in interactions and community participation, with the intention of involving people directly or indirectly and influencing the academic development of students regardless of their educational level. From this perspective, the learning community is a transformative project that proposes a dual objective: (a) to respond to the needs of the system and (b) to facilitate interaction among the participants.

The model called Virtual Learning Community (VLC) was designed to create the appropriate conditions for students to generate their own strategies for building knowledge through collaboration by using information and communication technologies (ICT). The use of didactic resources focused on the optimization of time and analysis of various topics in order to promote excellent levels of achievement. The main objective of VLC was to build knowledge in a shared way using information and communication technologies. The interest of the VLC lies in using ICT to establish, consolidate, and expand communication networks and exchange knowledge and experiences among group members. As such, it represents a category of learning communities.

With the globalization of knowledge and the impact of the COVID-19 pandemic, young people are living in a new technological era. These realities have forced teachers to adjust their work practices not only in terms of communication but also in the use of new tools. These new approaches impact course management, the delivery and mastery of content, and the way instructors interact with their students when using intelligent devices in a changing educational environment. The teacher–student relationship is mediated by these devices.

In this context, the VLC model offers its members the possibility of sharing information, experiences, and knowledge while socializing the participants to the community and promoting learning beyond the limits of the classroom. Making access to knowledge viable in an autonomous and personalized way strengthens self-esteem while encouraging stakeholder participation and boosting community leadership. As Torres (2001) affirmed, the learning community defines and organizes itself to the extent that it builds and commits to its own educational and cultural project in order to educate its members within an organic, cooperative, and collective framework, aware not only of their shortcomings and weaknesses but above all of their strengths.

The implementation of the proposal based on the VLC model was designed and developed in the Universidad Pedagogical Nacional Unit 151 Toluca during the 2020-2021 academic year. A group of students pursuing bachelor's degrees in pedagogy and taking the course, Introduction to Psychology and Development, Learning and Education, participated in the VLC. Implementing the VLC allowed us to improve the students' academic performance by building shared knowledge (Blando, 2003) using ICTs as a knowledge management tool.

Theoretical Foundation

The underlying pedagogy of VLC is what some call the "internet pedagogy," with an emphasis on spatial, temporal, and organizational characteristics. In addition, the interaction established between the actors involved in the teaching and learning process is structured virtually. As such, communication through smart devices is a fundamental condition for VLCs, and smart devices have become an essential pillar in the new pedagogy. The internet pedagogy privileges accessible sources of knowledge and networked, collaborative, and participatory learning.

It should be mentioned that the design of the curriculum, the geographical location of the students, the identification of their needs, the location, means of teaching, as well as the political and social philosophical aspects of the educational context, among other elements, configure some of the elements of the strategy that should be contemplated in the programmatic proposal. Rosas (1999) points out that from this process, human beings are constituted as people—in the interaction with others and from the social practice that each one develops.

Coll (2004) argued that VLCs are not based on real geography but on shared purposes through technology. From this perspective, participants can connect through smart devices from almost anywhere and can build their own formal or informal groups. They may be separated by space but not by time. Since communication can be carried out by technology in real-time, the VLC is able to partially overcome geographical limitations. Thus, the use of ICT in the VLC serves a dual purpose: (a) to facilitate exchange and communication among its members and (b) to promote learning. ICT provides a platform for creating and sustaining relationships among VLC members while also promoting their learning.

From this point of view, the importance of structuring virtual learning communities lies in the experience provided by the use of ICT as a tool aimed at establishing, consolidating, and expanding communication networks and exchange and interaction among members. However, the use of technology alone is not enough to build a virtual learning community. Rather, it is necessary to establish effective forms of organization and operation in accordance with a contemporary learning culture and, where appropriate, promote and support community development.

For Coll (2004), a VLC promotes interaction through the use of email, discussion forums, or informal chats. Through course websites or online educational platforms, the VLC also functions as an information warehouse, a classroom, and a space that links the community with the outside world. Such organization impacts academic performance and overcomes school failure by encouraging greater participation and solidarity among VLC members.

Thus, it can be said that VLCs arose from the need to overcome weaknesses in the current organizational system. Specifically, VLCs help break the barriers of time and space and push back against the idea that instructors have a monopoly on knowledge. That is, we approach the VCL with the understanding that the teacher is a facilitator of academic work rather than a presenter of content and that interactions within the learning community occur synchronously (via videoconference or chat) or asynchronously (e.g., email, discussion forums).

To do this, the teacher must be prepared to participate both in the work of the group and in the construction of the curriculum. In order to support the student's educational experiences more effectively, teachers must engage in a self-training

process aimed at exercising leadership of shared knowledge. Specifically, they must learn to create a learning environment characterized by a sense of community, support and trust, collaboration and interaction, transactional distance, social presence, and group facilitation rather than lecture (Gomez, 2005). Teachers must also learn skills for strengthening autonomy, sharing responsibility, dealing with diversity, and becoming sensitive to knowledge while also imbuing these characteristics among students. Here, I agree with Meirrieu (1989), who suggested that the teacher should be the one to determine the "scenarios for a new trade" in the context of a reflective, professionalizing practice.

Pedagogical Considerations of the VLC Model

An advantage that can be seen in the selected methodology is that it is based on dialogic learning, where the facilitator, in addition to the teacher, can be any member of the group and whose main characteristic implies a communicative conception that emphasizes interactions; however, it is also distinguished by being a proposal for didactic intervention because it can be worked at any time of the day provided that students have the freedom to contribute ideas, offer alternate explanations, perform tasks, make the most of their time, socialize knowledge, and make learning more meaningful.

Blando (2003) states that a VLC involves one or more groups of individuals who are linked by common interests, have autonomous willpower, and are engaged in a continuous learning process. Hence, it can be assured that this proposal provides the basic elements to solve the educational problem caused by social distancing in educational settings, as well as establishing learning communities structured around programmatic content whose main characteristic is the implementation in the virtual classroom itself.

De Lella (2003), for his part, argued that the LC proposal is based on the hermeneutic-reflective model because it supposes teaching as a complex activity, overdetermined and loaded with value conflicts that require ethical and political options. In other words, people are grouped in a VLC out of a personal desire to acquire or exchange knowledge on a topic of interest (Blando, 2003). In the same vein, they are united by the need for belonging, to establish friendships with other people who share similar interests, and for recognition of their own intellectual work or of a certain social group.

From this perspective, virtual learning communities must be developed as a systematized project that directly affect students and their achievements, supported

and structured to strengthen academic performance and, ultimately, graduation. Therefore, the VLC will be permanent and complementary to some subject, course, or workshop, as a means of academic reinforcement.

The above considerations can be summarized in three fundamental points:

- 1. It is important to consider that a new education approach corresponds to a new concept of a master trainer who does not resemble traditional academics engaged in rote, technocratic, and instrumental didactic education. Rather, this new approach requires a master trainer who can build and reconstruct knowledge and develop a critical position based on a holistic vision of reality, where academic work transcends the classroom environment, and each educational act is always something new and unrepeatable.
- 2. Strategies for teacher training should also be considered. Three options of a didactic nature include: (a) research into teaching practice, (b) the integration of research teams, and (c) the use of technological means for teaching that, in this case, would be used for learning.
- 3. VLC seeks to achieve objectives aimed at the formation of citizens with certain personal, professional, and humanistic values committed to the transformation of society.

The VLC Model as a Methodological Learning Strategy

For the implementation of the project, two general phases were structured: one of awareness and another of decision-making. Both focused on overcoming the social and educational duality present in various social and educational theories for the transformation of the context (e.g., Vygotsky, Habermas, and Freire, as cited in Gómez, 1994).

Valls's (2000) pedagogical proposal established five stages that guided the development of the project. Table 1 includes the stage as well as the actions that were carried out, considering the coherence and viability of each stage.

Table 1.

Development of VCL Based on Valls's (2000) Pedagogical Proposal

STAGE	ACTIONS	RESOURCES
Sensitization	Through a platform (e.g., Moodle), create a virtual classroom to sensitize students in a teacher training program regarding the problems that exist and the need to implement a viable strategy that allows them to achieve subject matter objectives and professional training.	Students and the facilitator
Decision-making	Assume an active attitude that is committed to transforming a learning community where participation requires your attention	Materials: subject book. Technology: 1 laptop, internet connection, and USB sticks for each student.
Dream	Determine under which participation criteria the objectives set to reach the evaluation will be achieved both in the proposed themes and in the application of the VLC.	Infrastructure: Class activities in the daily sessions in the virtual classroom, in addition to individual and group work.
Priorities	Analyze topics, establish collaborative learning, optimize learning time, and achieve expected learning outcomes, among others.	
Planning	Design the strategy that contemplates the operating conditions of the VLC for its implementation.	

It should be noted that in this methodology, it was necessary to recognize the role of the trainer in dialogic learning, the conduct of the educational process, the accompaniment to the work of the groups, and above all, the process of monitoring and evaluating with respect to the indicators that are raised for this item. Reference is made to the dialogic community model, which according to Valls (2000), was based on the objective of preventing conflict rather than trying to resolve them. The community or dialogic model, according to Gómez (2005), involves the entire community in a dialogue that discovers the causes and origins of conflicts to generate a community solution.

Evaluation System

The evaluation of the processes was carried out from the general objective, with instruments that served as evidence of the work generated. These included self-assessments, peer assessments, and the evaluation of tasks and products using performance rubrics.

Results

The students were able to approach the topics raised in the indicative programs from a collegial, collaborative, participatory, and flexible perspective that allowed them to perform work from a dialogical and interdisciplinary approach. It can be affirmed that the students monitored were competent to recognize and implement the VLC as a viable alternative inside and outside the classroom and apply principles learned to social contexts to strengthen their performance and role in their daily lives.

References

Blando, C.M. (2003). Virtual academic communities; Share to improve. DTE.

Coll, C. (2004). *Learning communities and the future of education: the point of view of the universal forum of cultures.* Paper presented International Symposium on Learning Communities. University of Barcelona. Retrieved from http://www.terrassa.org/educacio/tpec/general/documents/articles/Article21%20Coll. doc/.

- De Lella, C. (2003, Fall). El modelo hermenéutico-reflexivo y la práctica profesional [Teacher training. The hermeneutic-reflective model and professional practice]. *Decisio*, *5*, 20-24. https://www.crefal.org/decisio/images/pdf/decisio_5/ decisio5_saber3.pdf
- Elboj, S. C., & Oliver P. E. (2003). Learning communities: A model of dialogic education in the knowledge society. *Revista interuniversitaria de formación del profesorado*, *17*(3), 99–103 https://www.redalyc.org/articulo.oa?id=27417306
- Gómez, J. (2005). Comunidades de aprendizaje [Learning communities]. Retrieved from http://www.nodo50.org/movicaliedu/comunaprendizaje.htm

Meirrieu P. (1989). *Teaching scenario for a new trade*. EME French Social Editions.

- Rosas, L. (1999, Fall). Una experiencia de formación de educadores de personas jóvenes y adultas [An experience of training of educators of young people and adults]. *Decisio*, 55–59. Retrieved from
- Torres R. M. (2001, October 5–6) Learning community, rethinking education from local development and from learning. Paper presented at the International Symposium on Learning Communities, Barcelona.
- Valls, R. (2000). *Learning communities: An educational practice of dialogic learning for the information society* [Doctoral dissertation, University of Barcelona].