Original article

The contribution of hyper classrooms in teacher training

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ABSTRACT

This article presents a reflective and documentary research on the contribution of hyper classrooms in teacher education. The main challenges of teacher training are discussed. The methodology is based on the review of scientific articles and texts related to the subject, among which authors. Finally, it is concluded that hyper classrooms offer a flexible and collaborative learning environment that can help teachers to develop the necessary competencies to face the challenges of 21st century education.

Keywords: Hyper classrooms; Innovation; Training docents.

Introduction

Educator training is essential to ensure excellence in teaching. Today, teachers face a number of challenges when trying to integrate new technologies into their educational practices. To overcome these challenges, teacher training must be comprehensive and adaptable, preparing teachers to effectively use technologies in the classroom. Hyper classrooms provide a learning environment that can enhance educational strategies, which motivates the need for this research. First, we seek to understand the theoretical foundations of the variable; then, a second research will be conducted to

explore the teachers' perspective on the implementation of these technologies, with the objective of improving their training and making the most of the digital resources available.

It is important to highlight that, although there is a great deal of research on hyper-classrooms and their impact on students' education, there is a paucity of studies focused on the preparation of teachers by providing them with training in the effective use of virtual tools for teaching. Therefore, this current research becomes relevant by not limiting itself only to theories, but seeking to conduct a descriptive quantitative study that generates practical recommendations based on the experience of teachers.

Development

Digital classrooms, also known as hyper classrooms, are educational environments that integrate digital technologies to create a flexible and collaborative learning space. These technological tools enable teachers and students to access a wide variety of educational resources, enabling them to work autonomously, in groups or collaborate with other teachers Hurtado (2014). Hyper classrooms can contribute to the development of teacher training in the following ways:

- They facilitate access to educational resources: by providing access to e-books, videos, simulations and games, hyper classrooms allow teachers and students to explore a diversity of educational resources. This contributes to the development of their knowledge and skills in various areas.
- Promote collaborative learning: Hyper classrooms enable teachers and students to collaborate together. This collaboration fosters the development of skills such as communication, teamwork and problem solving.
- They encourage experimentation: By allowing teachers and students to experiment with new teaching methodologies and strategies, hyper classrooms foster creativity and innovation in the educational process.

For Mariano Fernandez Enguita, new technologies have been introduced in the educational field with the aim of instructing future educators in the natural integration of technology in the teaching-learning processes Hernandez (2019). For the author, the most evident characteristic of the hyperclassroom is not only its size or the idea of joining two or more groups, but the need to reorganize it, make it flexible and adapt it for both individual and group use, filling the space with mobility and vitality. In addition, this classroom offers several workspaces where participants can experiment and learn in a more innovative and motivating way; it also includes mobile furniture, adjustable to different heights and with great tolerance to mobility, which allows learning without being limited to a uniform design.

Prieto, Diaz and Santiago (2014), states that a hyper classroom, is a space without hierarchies, adaptable and modular, designed for collaboration between teachers and future teachers, although it encompasses various forms of learning and teaching, the creation of a hyper classroom for the use and training of teachers requires considering certain characteristics, which include:

- Dimensions: Large open and flexible spaces are needed, not only to unify different areas, but to adapt to diverse educational methodologies.
- Flexible groupings: Combine work in small teams, individual and large groups, mixing students from the same course, cycle or stage.
- Change in the teacher's role: From transmitter of content to designer of learning environments, experiences and trajectories.
- Micro teams or co-teaching: The teacher is part of a team that prepares teaching collaboratively.
- Inductive methodologies: Promotes multidisciplinary and interdisciplinary learning through strategies such as project work and collaboration.
- Flexible furniture: It should be varied, light and mobile to adapt to the needs of students and the demands of teachers.
- Hypermedia: Combines face-to-face, online or blended activities, using technology and school or extracurricular dynamics.
- Flexible time: Flexible school schedules, with longer periods divided into short times for various activities and methodologies.
- Hyper-reality: Use of technologies to bring content closer to the students' reality.
- Openness to the community: Involvement of companies and families to provide resources to classrooms and support the teaching-learning process.

According to López (2021) the importance of creating a flexible learning environment in this context, is the necessity to break with traditional structures and verticality in teaching, promoting a collaborative approach. In addition, he emphasizes that both the furniture and the layout of spaces should invite innovation.

Avila (2020) highlights the teacher's responsibility to open spaces during the teaching process so that students can develop higher thinking skills, such as searching, creating, manipulating, transferring, criticizing or designing. He adds that interactive dialogue alone does not achieve these objectives. The same applies for teachers among themselves; with hyper classrooms it is possible to deliver workshops that help teachers to improve their practices.

Fernandez, M (2017), shows that the hyper-classroom model facilitates interaction between people and favors the use of methodologies such as co-teaching, allowing two teachers to work simultaneously with a group of students and create simulation spaces; therefore, teachers can do collaborative work with their colleagues to talk about their experiences and generate didactic strategies inside and outside the classroom.

The authors consulted emphasize that the hyper-classroom is not limited to being a physical space, but represents a curricular innovation that seeks to equip teachers with new tools that they can implement in their classes, ensuring that everyone acquires these skills to apply them in the future, a good project to implement in the hyper-classrooms is teacher training with a distinctive approach, the massification and empowerment of the training model at the teacher level and in the practice centers through the construction of hyper-classrooms in all university campuses.

Considering the empowerment that technology has had at the educational level, several authors point out that virtuality has adopted a more technological approach that leads teachers and students to use digital resources in a different way to facilitate learning and interaction in real time.

The Ministry of Education in Chile (2023), addresses the transition of innovation in education, arguing that the time has come to evolve towards the hyper-classroom. It stresses that the traditional conception of the classroom has become obsolete and that the hyper-classroom represents a response that is more in line with current and future educational needs. Therefore, education authorities state in several news items that it is time to adopt the hyper-classroom, since it is a concept that refers to an educational approach that has existed in Montessori schools for many years.

Likewise, it can be highlighted that hyper classrooms are distinguished mainly by their dimensions, starting as a super classroom that not only unites several groups and spaces, but reorganizes, flexibilizes and adapts them for use in large, small or individual groups, in addition, it promotes collaboration between teachers, who no longer work in isolation, but as part of a team, sharing tasks and preparing teaching collaboratively. The implementation of these tools could lead to a change in the structuring of learning, moving from a disciplinary model to a multidisciplinary or interdisciplinary one. This means that teaching would be tailored to the specific challenges of problems, cases, projects or services, rather than being tied to particular subjects. Collaboration with external actors, whether in person or online, is facilitated by escaping disciplinary constraints.

For the case of hyper classrooms, not everything is good, they are also limited because although Chilean educational legislation presents restrictions to create flexible work spaces, it is crucial to adapt educational spaces to current needs and active learning, since innovative projects such as hyper classrooms seeks to break with traditional structures and provide a flexible and adapted educational environment. The change in the educational system must be gradual and comprehensive, involving all levels of education to offer a quality education that evolves along with society.

Conclusions

This documentary research allows us to conclude that the hyper classroom becomes hyper, when integrating digital technology as a fundamental part of the educational environment without interruptions, digital technology is not simply an optional complement, but an informative and communicative environment that replaces the printed environment, being essential to move from the traditional lesson to autonomous, collaborative and networked work. Likewise, a reorganization of class times is required so that teachers have spaces for training with longer periods for class preparation, so that they can incorporate what they have learned in their classrooms. In abstract, the hyper classroom represents an evolution with respect to the conventional classroom, promoting collaboration among peers and openness to a more diverse and accessible environment.

After consulting the bibliography, the concept of the hyper classroom represents an innovative educational paradigm that goes beyond the traditional conception of conventional classrooms. Hyper classrooms are characterized by their flexible and collaborative approach, integrating digital technologies to create dynamic learning environments. Through the review of various approaches and perspectives of experts in education, it is highlighted that hyper classrooms are not only limited to a physical space, but have the ability to facilitate access to a wide variety of educational resources, foster collaborative learning and encourage experimentation are fundamental aspects that hyper classrooms bring to the development of teacher training. Adaptability, flexibility and mobility in the design of the space, as well as the change in the role of the teacher from transmitter to designer of learning environments, are key elements highlighted by the experts consulted.

Thus, the introduction of digital technologies in education, according to Mariano Fernández Enguita, aims to instruct future educators in the natural integration of technology in the teaching and learning processes. Likewise, the importance of breaking with traditional structures and

fostering a collaborative approach is emphasized by several authors, such as López (2021) and Ávila (2020).

The implementation of hyper classrooms is not without its challenges, such as legislative restrictions and the need to adapt educational spaces to changing demands. However, the consensus is clear on the need to evolve towards this approach, considering it as a response in line with the current and future demands of education.

Ultimately, the transition to hyper classrooms involves not only physical changes in the layout of space, but also transformations in the very conception of teaching and learning. The integration of technologies, collaboration between teachers and students, and openness to multidisciplinary approaches are crucial aspects to achieve an education more in line with the demands of today's society.