

CRITICAL PERSPECTIVE OF EDUCATIONAL INNOVATION FROM ACTIVE LEARNING METHODOLOGIES

Perspectiva crítica de la innovación educativa desde las metodologías activas de aprendizaje

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Abstract

The complexity of the challenges posed by the 21st Century calls for innovation, especially in the field of education, due to its presence, relevance and potential for the generation of solutions, forms of action and education that can be assumed by citizens, mainly those who are immersed in their educational process. For this reason, the aim of this work is to propose active methodologies as suitable means for implementing educational innovation centered on social processes, which place people at the center of the phenomenon, as beings in formation and, likewise, as creators and maintainers of innovations that promote well-being. Initially, it outlines the difficulties of the pedagogical renewal effort, in some of its fundamental texts and moments, to respond to the challenges and threats faced by contemporary societies, discussing some relevant notions of theory and Philosophy of Education. This contribution then attempts to add to the ongoing reflections on the Philosophy of Innovation, as a discipline in germ, which must in turn be linked to a proposal for a Philosophy of Educational Innovation. The aim is then to problematize, under these theoretical premises, pedagogical creativity and action programs linked to the tradition of activism and the recent proposals of Active Learning Methodologies, through the contribution of the social approach to educational innovation.

Keywords

Educational Innovation, Philosophy of Innovation, Activism, Active Methodologies, Educational Paradigm.

Resumen

La complejidad de los desafíos que plantea el siglo XXI interpela a la innovación, especialmente en el ámbito pedagógico, por su presencia, relevancia y potencialidad para la generación de soluciones, formas de acción y formación que sean asumibles por la ciudadanía, principalmente por quienes están inmersos en el proceso educativo. Por ello, este trabajo tiene la finalidad de proponer las metodologías activas como medios idóneos para implementar la innovación educativa centrada en los procesos sociales, que ponga a las personas al centro del fenómeno, como seres en formación y, al mismo tiempo, como creadores y sustentadores de innovaciones promotoras de bienestar. Inicialmente, se esbozan las dificultades del esfuerzo de renovación pedagógica, en algunos de sus textos y momentos fundamentales, para responder a los retos y amenazas que enfrentan las sociedades contemporáneas, discutiéndose algunas nociones relevantes de teoría y filosofía de la educación. Seguidamente, esta aportación trata de sumarse a las reflexiones en curso sobre filosofía de la innovación, como disciplina en germen, que debe a su vez vincularse con una propuesta para una filosofía de la innovación educativa. Se pretende, a continuación, problematizar, bajo estas premisas teóricas, la creatividad pedagógica y los programas de acción vinculados a la tradición del activismo y a las recientes propuestas de las metodologías activas de aprendizaje, a través de la aportación del enfoque social de la innovación educativa.

Palabras clave

Innovación educativa, filosofía de la innovación, activismo, metodologías activas, paradigma, educativo.

Introduction

This research tries to critically explore various concepts and proposals related to relevant aspects of the innovative commitment of our societies, confronting them with the practices and learning models in educational environments. Thus, it aims to enrich the reflection in the field of



innovation studies, especially as regards the theory and methodology in education, with the ultimate purpose of innovative educational processes to promote and maintain the social transformation necessary to respond to the enormous challenges of the 21st century. The central problem that inspires and mobilizes this and other research and practices is, therefore, to try to test responses from educational reform to the problems and threats that besiege the balances of coexistence in our complex and pluralistic societies: protection of human rights, achievement and maintenance of alliances for world peace, promotion of human well-being and the health of all people, reduction of environmental impact, gender equity, reduction of inequalities, among many others (UN, s. f.).

Hence, this work defends the fundamental idea that an educational reform that seeks to rise to these challenges must critically review its history, conceptual bases and methods, and evaluate the reasons for failures or insufficient results obtained throughout an already long tradition of designing educational change. Likewise, the importance of this proposal derives from the need to orient this educational change towards new models, methodologies and didactic endeavors that try to grant validity from theoretical foundations that are the result of a critical work of a pedagogical-philosophical type. It is worth noting that the proposal presented here is based on the fact that innovation appears as a central notion of a multitude of planning strategies, both public and private, concerning a wide range of productive and socio-cultural sectors. In fact, educational innovation is a dominant topic in the design of educational policies and projects and strategies to improve teaching, and for this reason this concept should be elucidated to question the relevance of eminently technoscientific and market-oriented budgets, and direct attention to renewed social paradigms.

The research that supports this document is based on a comprehensive documentary review, which has included books, scientific articles and other reference sources framed in an extensive period of time, in order to have a complete vision on the concept of innovation, its application, scope and limitations in the educational field.

Methodologically, the analysis of the texts has been accompanied by the discussion of their theses among members of the research team and other professionals of teaching practice and pedagogical reflection. Likewise, these works are framed within the framework of educational innovation projects developed in the institutions involved, throughout whose execution, during the last years, the proposals have been partially implemented in innovative educational environments,



with promising results and with relevant observations for the design of improvement proposals.

The article is structured in four main sections: “Education and social change”, in which the current and relevance of the topics addressed is demonstrated, through the analysis of the evolution of education over time, especially its development after the Second World War, evidencing the immobility of the system despite the great political, social and environmental transformations around it. “Hegemonic paradigm of innovation (educational)” raises the way in which innovation has been conceived, inside and outside the educational field, making its gradual appropriation by scientific-technical discourses and market efficiency notorious, generating the loss of meaning in relation to the satisfaction of human needs, with the consequent opacity of its theoretical and methodological consistency. This element of theoretical and conceptual clarification is relevant, since it is proposed for the correct pedagogical and ethical characterization of transformative practices, especially considering that educational innovation is one of the central imperatives of educational policies today. Faced with the problems framed in the first two, it presents “Towards a new social paradigm of educational innovation”, where the theoretical and methodological bases can meet the need for social transformation with a broad human sense in the personal and collective. Finally, “University and activism in higher education: factors for innovation” refers to the possibilities of implementing the methodologies mentioned in the previous section, including examples of their implementation in higher educational environments from different parts of the world, in which they have demonstrated their transformative potential.

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Education and social change

The following statement can be read on the website of the United Nations Development Program (UNDP, s.f.):

20th century institutions will not be able to solve 21st century problems. The gap between the structural, interrelated, and increasingly complex and unpredictable challenges we are facing and the way we plan government and development issues is growing. The climate emergency, lack of trust in institutions, and growing inequality, particularly among women, make it clear that progress toward new ways of understanding and action is needed. *And yet, we continue to apply the same old methods* (emphasis on the original).

The gaps referred to in this text seem to show an inability or delay of the institutions formed and stabilized during Modernity to face with solvency the increasingly complex and structurally interrelated challenges of Modernity as a threat to the social and political balances of our societies, and to the very possibility of survival of life on the planet. The application of the same methods as always does not account for problems whose complexity overflows, both the technical coverage that a certain current paradigm puts at the service of problem solving and the criteria to legitimize the type of planning that operationalizes the integrative sequences of activities that are designed for the intervention in the real. Perhaps, as the text also suggests, this inability is due to an essential lack of understanding, which correctly substantiates and justifies the strategies of action that seek to have a corrective or transformative impact on reality.

Education is one of those fundamental institutions whose reform is key to building social improvement and facing these structural challenges with certain guarantees, it is part of the discourses and what of can be understood as a standardized notion of what it means to educate or at least “institutionalized education”. The correspondence between progress and/or sociocultural development, on the one hand, and education on the other, is part of the pedagogical concerns of the Enlightenment and, especially, after World War II. This new post-war discourse of progress and well-being (Cornago Prieto, 1998; Parpart & Veltmeyer, 2011; de Rivero, 2014) made formal education the most relevant aspect to trigger or reinforce processes of economic and cultural modernization, both in industrial societies and in developing regions. Since then, most theories, policies, and projects aimed at discerning, expanding, and systematizing the coverage and quality of formal education “have regarded education as a central force for sociocultural development and have seen formal schooling as one of the agents, if not the principal, of desirable social change” (Hawkins, 2007, p. 147). The democratization and mass education, also at the higher level, was precisely one of the objectives and consequences of the developmentalist policies aimed at the creation and support of formal school systems and study aids, with the aim, among others, of contributing to the creation of the necessary workforce to the modernizing project of nations (Pineau, 2001).

This evolution has led to a “priority and generalized presence of the educational in our society” (Casado, 1991, p. 27). Casado, based on data from UNESCO, more than thirty years ago indicated the unstoppable progress of the schooling process, pointing to the ubiquity of education as a social problem “of our days, of our environment”, in front of



classical theoretical references that reduced it to “concept” (pp. 26-27). In the latest report commissioned by this body, *Reimagining our futures together*, aimed at “rethinking the role of education in key moments of social transformation” (UNESCO, 2022, p. V), the data corroborate this trend. Although the figures still show regional biases, their growth continues to confirm that “since the Second World War education has become the largest branch of activity in the world in terms of global expenditure” (Faure, 1977, p. 60), which leaves no doubt about the evidence that “the expansion of access to education in the world, since education was recognized as a human right, has been spectacular” (UNESCO, 2022, p. 20).

Such a proliferating presence of the educational is understood taking into account that education is mostly conceived as the main agent in the promotion of prosperity and social, even moral and cultural progress. So, however profound and convulsive, the changes in the structure of our societies may have been and are being the basic conviction about “the power of education to bring about profound change” or the “transformative potential of education as a pathway for a sustainable collective future” (UNESCO, 2022, p. III) which does not seem to have been undermined. However, this transformative potential does not seem to have been realized in the sense of bringing about the social change that the education reform has been promising for decades. It could be assumed that education is one of those institutions of the 21st century, and perhaps the one on which the greatest responsibility lies, whose ways of understanding and action, of producing and transmitting knowledge and of turning it into operations and practical interventions, are shown to be incapable of offering solutions to the challenges of the present. And this because *it continues to apply the same methods*.

The inadequacies and shortcomings of this educational model have stimulated numerous purposes of reform or innovation, sometimes aimed at implementing mechanisms of adjustment over the conventional paradigm, others aimed at total reformulations of its modern institutionality, accompanied by theoretical and philosophical theses of a critical, radical or revolutionary nature. The strong link established between schooling and the ideals of the developmental career –especially when development and cooperation programs were transferred to poor regions– promised social and political achievements such as modernization, prosperity, democratization, national integration, or respect for human rights (the latter being the central core of that modern subjectivity that the expansion of literacy would produce). But moments of global crisis at various levels would inevitably translate into questions such poli-



cies and their educational correlates, the results of which fell short of their promises of well-being and democracy.

By the 1960s, the problems of the instituted schooling model were evident, in terms of teacher training, absenteeism, adaptation of the curriculum to the context, rural-urban tension, minority education and women's education (Hawkins, 2007, p. 148). This "traditional" school, in terms of master classes in which a group of students is taught following general schedules and programs – a consequence of the modifications of the second half of the 20th century (Reboul, 2009, p. 43) – was then the subject of numerous criticisms that tried to incorporate reforms and democratizing alternatives, which in some case reached, as is known, the extreme of the theses of de-schooling. The democratic optimism of the 1960s (Stevenson, 2018, p. 152) stimulated numerous attempts to design the kind of educational change that would address these mismatches; a period of incentives for reform during which "innovation" would be one of the magic words that most influenced school planning (Cawelti in Fullan, 2011, p. 2). Among other testimonies of that moment was the report of the Faure Commission, *Learning to be: the education of the future* (1972), which openly recognized the inability of improvements or adaptations on traditional education systems to withstand the criticisms they were receiving, as well as to consider without concern "those vast areas of shadow that mark on the planet a geography of ignorance [...] a geography of hunger and child mortality" (p. 27).



Hegemonic innovation paradigm (educational)

Innovation, reform or renovation, are being offered as a response to the obstacles of education to fulfill this ambitious mission that has been assigned to it within the modernizing project. Undoubtedly, the purposes of renewal at various levels (curricular, methodological, organizational, roles of teachers and students) have been a constant since the progressive proposals advocated by the "new school" movement of the late nineteenth century. However, the urgent need to transform education in recent decades has acquired a character of local specificity and even urgency that makes it:

Entirely new, no precedent can be found. It comes not, as has so often been said, from a simple phenomenon of quantitative increasing, but from a qualitative transformation that affects man in his deepest characteristics and that, in some way, renews him in his genius (Faure, 1977, p. 28).



The difficulties encountered by the developmental educational model were answered, as noted above, by the innovative rise of the proposals of the pioneers of educational change of the 1950s and 1960s (Fullan, 2011, p. 1). Since then, the innovative process has not ceased, as it tries to be consistent with the demands and challenges of the new trajectories of societies, which correspond “to new knowledge, new rules of life, new organizations and new social relations” (Botrel, 1996, p. 250). Alluding to the exceptional nature of the change demanded, the Faure Commission (1972) pointed out the consequences without historical parallel of the scientific-technical revolution, the *mass media* and cybernetics. The structural and cultural transformations that have occurred since then emphasize this urgency, abound in the challenge of the traditional matrix of education (Avilés Salvador, 2020, p. 260) and urge us to understand the greater complexity of the changes: ecological crisis and imperatives of sustainability and greening of knowledge, the emergence of the knowledge society and transformations in the organization of work (Tedesco, 2014), the internet, digital revolution and social networks, and the most recent phenomena of post-truth, *fake news* and disinformation. Moreover, as the enveloping dynamics of all these crises, globalization and related processes contribute to the diffusion and reinforcement of the dominant paradigm, while strategically modifying it to adapt it to the needs of a globalized economy (Hawkins, 2007, p. 156).

As Tedesco (2014), a democratic, accessible education, oriented towards the personalization and construction of the learning process and critical reflexivity, based on social experiences and promoting capacities for social cohesion:

It is an education substantially different from the traditional one, from the point of view of its management modalities and its contents. Transforming education is therefore the order of the day in most countries (p. 56).

There is no shortage of analyzes that, almost accompanying the reformist process for more than a century of criticism of pedagogical traditionalism, have been marking the reform with negative balances in terms of achieving deep and significant transformations. Caution – if not unmitigated recognition of failure – dominates in judging the ability of innovations to replace or alter the dominant educational paradigm, which has shown both an inflexibility and an ability to adapt and absorb the impact of change, possibly underestimated by reformers (Hawkins 2007, p. 155). With this “very new education that we all want, but that we cannot even

remotely achieve for the moment” (Garrido Landívar, 1984, p. 137), the frustration in the 80s is portrayed by the scarce results of the proposals of the pedagogies of the 20th century. *Education holds a treasure* (Delors, 1996), collecting the witness of the Faure Commission, acknowledged the resounding failure of previous reformist attempts:

As previous failures show, many reformers take too radical or too theoretical an approach and fail to capitalize on the useful lessons of experience or reject the positive legacy of the past [...] attempts to impose educational reforms from above or from abroad were a resounding failure (p. 23).

After a few more decades of reforms and innovative projects, the conclusions of Rodríguez (2000) also left no doubt about the immovable educational scenario: “At this moment” the teaching does not reflect that “reality permanently sought, but never achieved. A goal that is presented as unattainable” (p. 455). Educational innovation does not seem to have been able to take off, according to the most critical diagnoses, from the pedagogical traditionalism denounced since the end of the 19th century or—from a broad and comparative perspective—to escape from the globalized hegemonic educational paradigm. Perhaps the modalities of change that is formalized and practiced are little more than the illusion of innovative and radical alternatives, because in some way they are produced and shaped from within the dominant paradigm (Hawkins, 2007, p. 157) and, in short, in one way or another, they end up succumbing and perpetuating the same methods as always.

The denunciations of failure or dissatisfaction with the timid achievements made in the face of the motley historical, institutional and normative panorama of so many perspectives and promises of educational change have also stimulated many attempts to elucidate the resistances and difficulties that prevent transformation. The analyzes have examined weaknesses and shortcomings in schools or innovative trends to point out their theoretical inadequacy to reality, practical inapplicability, obsolete or insufficient conceptual framework, or fragility to face greater forces (ideological, political, economic) that neutralize them.

We would now like to point out the possibility of collaborating with these analyzes from a perspective perhaps not yet sufficiently explored, in the idea of clarifying the reasons why the conventional model of teaching tenaciously resists. We start from the fact that some categories or syntagms have taken control of the discourse and have monopolized



the landscape of available formulas and, with it, the faculty to refer and certify the possible realities. In naming the need for change in education:

The words innovation, change, reform (capitalized and singular), reforms (minuscule and plural) and renewal, although they do not mean the same thing or serve to name the same pedagogical practices, move in very close semantic fields (Martínez Bonafé, 2008, p. 78).

It would be possible to ask whether the irruption and consequent ubiquitous presence of the term innovation for some decades in the dominant, academic, institutional and legislative discourses (Fernández & Jasso, 2023) have induced any major alteration in the conditions of what is collectively accepted as education reform. The question is pertinent in view of the fact that the pedagogical discourse of innovation has been established quickly and without many obstacles in the political agenda, crystallizing in normative frameworks aimed at modifying teaching and organizational practices (Quilabert *et al.*, 2023, p. 59). The preference for innovation as a privileged textual brand has displaced other notions that seemed well established in the theoretical and practical tradition of educational change, which only adds perplexity to the already plural and contradictory history of the alternatives of pedagogical renewal of the twentieth century (Garrido Landívar, 1984; Rodríguez, 2000; Luelmo del Castillo, 2018). This situation has raised useful suspicions and criticism about the superficial and even conservative nature of the innovative process and discourse:

It may be that the same notion and its respective socio-political, institutional and educational companions do not operate as a fetish, a claim or a label; as a simplistic way consisting of equating the new with the good, in confusing appearances with the most profound transformations that would be desirable, relevant and fair (García Gómez & Escudero, 2021, p. 5).

These reflections—which investigate the conceptual problematicity of the idea of innovation, in contrast to other semantics of change—are incomplete if a more comprehensive and complex look is not cast on a larger problem, which overflows the educational fact, but which conditions and distorts it. Taking as a horizon of reflection the methodological activism and the contextual implication of learning, which have been placed from the origins of the renovating impulse as a key to understand and enable the socio-educational transformation, it is considered that it would be pertinent to stop in the analysis of the concept of innovation



(dry). Elaborating a critical perspective about the history of innovation, its itineraries in the past and the perspectives and possibilities of evolution towards possible futures can contribute to better understand the confusion and mistakes around educational innovation and better guide the desired trajectories. It can then be said that the notion of innovation has acquired the category of paradigm, if we understand the latter, in a broad sense, as an encompassing idea that goes beyond simple theory, as concatenation of assumptions that crimp into forms of transversality, or as a certain organization of conceptualization with consequences for research (Follari, 2003).

In this way, it could almost be said that innovation or the idea that has been canonized from it, as a paradigmatic function, is taken uncritically as a value in itself, loaded with strong normative connotation and social desirability, and associated with presumably positive values (Quilabert *et al.*, 2023, p. 75). This opacity of its problematic consistency hinders its conceptual articulation and the critical approach of the condition of innovative discourse as a structuring factor of networks of purposes and justifications, which legitimize both research trends and some fundamental laws and discourses, which design and channel the evolution of our societies, social change and progress. Innovation is seen uncritically as a good thing and is conceived *a priori* without thoughtful intermediation, as a panacea to solve a wide range of socio-economic problems, from the financial crisis to climate change or from health issues to well-being in developing countries (Ufer & Godin, 2018, p. 62; Blok, 2021, p. 73).

A large number of provisions and devices, at very different levels, give concrete expression in the phenomenal world of social life and its textual productions to this paradigm of innovation, and especially for what interests us, regarding the organization of knowledge, the social distribution of knowledge and its organization from centers and networks of economic, institutional and symbolic power. The incomprehensible collection of discourses that refer to innovation can be characterized by a certain regularity in dispersion, while in some way all of them refer to the same object, share in some degree a common style in the production of statements, and a verifiable recurrence in the use of concepts, categories and expressions that refer to common themes. On the other hand, this dispersion suffers from inconcretion, from the lack of a sufficiently developed and dialogized theoretical framework, from conceptual clarification and from axiological orientation (Palacios Miele, 2020). These shortcomings and forgetfulness risk turning innovation, from a necessity for change, into an empty gesture marked by discursive inflation and the



saturation of institutional and financial efforts that, to a large extent, and for this reason, are ineffective, burdensome and generate rejection and social fatigue. It is not surprising that—from perspectives committed to critical thinking about the values of innovation—this process has been denounced by the inflationary use of the term (Pacho, 2009, p. 34), by its superficial character of mere fashion or fetish, or qualified as “innovofilia” (Gracia Calandín, 2017, p. 15).

The uncritical assumption of innovation does not establish the premises for an axiological neutrality, but it is precisely its paradigmatic condition that authorizes “supralogical” principles of thought organization that concealingly “govern our vision of things and the world without our being aware of it” (Morin, 2005, p. 28). For this reason, the concept of innovation, which seems to have established itself as a dominant discourse for some decades to describe and mobilize social change and progress, is guided by principles that most innovation scholars identify by their techno-economic and market-oriented character (Echeverría & Merino, 2011; Ufer & Godin, 2018; Blok, 2021; Schomberg & Blok, 2021). This assumption, in turn, implies a linear model that understands that innovation only comes from scientific research, which is well reflected in the famous acronym R+D+i (Echeverría & Merino, 2011, p. 1031).

From a historical perspective, the concept of innovation has a long trajectory and goes back to antiquity (Aguilar Gordón, 2020b and c), referring to the idea of novelties or ruptures, both in cognitive and social aspects and in the broadest sense of the word (imitation, invention, creative imagination, change), and only recently has it been restricted to technological innovation (Blok, 2021, p. 75; Echeverría & Merino, 2011, p. 1032). As Godin’s works demonstrate, innovation has historically had an intense negative connotation for the destabilizing force of the novel, as a rupturist incorporation into the bosom of a stabilized political organization, which was received with caution and resisted by conservative inertia; it is only after the beginning of the 19th century that the concept gradually enters into a context, widely welcomed and appreciated, of progress and utility. Likewise, the field of commercialized technologies will be more present in the daily discourse of innovation as the dominance of the hegemonic economy becomes more prominent and the concept is shaping its meaning in terms of goods and technological products (Schomberg & Blok, 2021, p. 4676). After World War II, policies, management, and business further tied innovation to the market, making “technological innovation” the most common meaning today (Ufer & Godin, 2018, p. 70).



One of the interesting consequences of this evolution is that the notion of innovation has been losing critical potential, while its semantic density has been gaining in inconcretion and polysemy (Aguilar Gordón, 2020b, p. 22; Martínez Bonafé, 2008, p. 79; García Gómez & Escudero, 2021, p. 5). This fact makes innovation a clause adaptable to any disciplinary discourse and apparently open to a variety of modalities of incorporation of novelty into products and processes, favoring as a consequence the implicit acceptance of its commercial technical bias, of little self-reflexive problematicity and of a conditioning nature. As the world and the dominant economic-business languages have been assimilated, innovation, while being subject to “pure scientism and technicality” (Aguilar Gordón, 2020c, p. 272), has also become depoliticized and covered up with that self-evidence that consecrates its goodness prior to conceptual analysis or any type of evaluation of its effectiveness or suitability, other than the parameters for measuring success assigned by the market. As Echeverría and Merino (2011) affirm, the economist paradigm that has prevailed in policies and innovation studies since the 1980s, is based on two principles: creating value from innovation consists in creating economic value and the agents that perform this function are companies, i.e., “the success or failure of technological innovations manifests itself in markets” (p. 32).

Perhaps an analogous evolution could be sustained as a thesis with which to confront, as said above, the general idea of innovation and its study, with the mutations that educational change has suffered until the current equation of all pretensions of pedagogical reform with educational innovation.

Towards a new social paradigm of educational innovation

In these last sections a proposal for reflection will be tested that tries to build a theoretical contribution in the field of educational innovation, which while trying to join the works mentioned here and those who continue to reflect in this line, will also try to provide a foundation for innovative teaching practices already existing and to design within innovative projects. The proposal outlined so far on the philosophical problematization of the notion of innovation and the need to constitute a philosophy of educational innovation can identify areas of practical-methodological operability in pedagogical activism and in the most recent active learning methodologies. The latter are understood as the methods, techniques



and strategies used by the teacher to promote the active participation of students, aimed at learning both generic skills and aspects of specific disciplines (Puga Peña & Jaramillo Naranjo, 2015). In particular, these suggestions aim to conceive methodological proposals as suitable tools for educational spaces to become agents of the social turn of innovation.

It can be said that educational change responds to the very complex bioanthropological characteristics of the human being in its cultural and linguistic constitution, determined by the biological, psychological and moral incompleteness of the human being. It corresponds to the phenomenon of education, understood in its varied and historically determined forms of phenomenical manifestation to be deployed as the necessary process of incorporation into a cultural context of the students, within the framework of socialization patterns and behavior. These are never definitively and conclusively stabilized by the constitutive indeterminacy of the human and the productively creative character of its existential and cultural work: “The internal or structural historicity of human culture is but the other name of its permanent innovation, of its mobility, its volatility or, what is the same, its permanent creativity” (Pacho, 2009, p. 35).

Educability, understood as a process triggered by the ontological precariousness of the human being, will be corresponded by the phenomenology of educational, cultural and socially located facts in their singular pluridimensionality, uncertainty and transience, which inhibits that educability is applied from a normativity that categorically closes the human: “The pedagogical discourse on innovation in school is very old, and in its becoming shows the tensions between desires and possibilities in the social field of education” (Martínez Bonafé, 2008, p. 79). It is for this bioanthropological condition of education and its dynamic, creative and contextual character, so that educational innovation, analogous to what happened with innovation (at face value), would resist the reductionism of its possibilities to a techno-economic and efficiency paradigm. In this sense, it has been possible to affirm about the evolution of theories and practices of educational change that “the tools we have in current innovation are those that respond to what the market demands and the proposals of neoliberal economics” (Martínez & Rogero, 2021, p. 73). Not infrequently, innovative design is carried out with the back to those processes that nourish the educability of the person, specially the relationship with other human beings and with their environment, through which it develops and who, finally, directly or indirectly, receive the results of the educational potential deployed. Hence, the advances that have been developing in the field of innovation studies and the efforts of those who try



to build a philosophy of innovation that critically and in depth explores this concept, in its historical, political and institutional implications, and in its ontological, epistemological and axiological planes (Aguilar Gordón, 2020b, p. 22), should have consequences in the task, also to be done, of elaborating a philosophy of educational innovation (Aguilar Gordón, 2020a), an inexcusable effort to promote the true desired reform.

A genuinely innovative education, based on ethical premises and the consideration of the anthropological dimension of the phenomenon (Higuera Aguirre, 2020), would be one oriented from and for collaboration, meaningful inquiry and substantive involvement in a creative process in the critical management of information, actively aimed at stimulating the global and integrated commitment of each educational actor with the aim of transforming society (Pozuelos & Rodríguez, 2021). However, despite the long history of the “new school” approaches (Marín Ibáñez, 1976) and the educational innovation that emerges from it – and that is prolonged and promoted recently with the inclusion of ICT in educational practice, there remain ways of understanding and practicing education that could be described as traditional, uncritical, fragmented and inflexible (Bona, 2021 in Cruz & Hernández, 2021), where teachers “teach” and students “learn” and are evaluated through standardized exams.

Faced with these resistances, the challenge for change should be oriented to build every day another school, a different school, where educational innovation emerges and is lived as a process from the inside out, where teachers and students are the ones who practice new ways of learning, analyze the results and continue transforming into a process of continuous improvement and constant collaboration (Pozuelos *et al.*, 2010). In this way, they can germinate collaborative dynamics and subjectivities that overcome the immobility and resistance of traditional educational models, realizing precisely the inadequacy of the linear notion of innovation, by testifying that very diverse and heterogeneous spaces of social and educational life are highly creative sources of educational change.

This situated and proactive innovation can account for experiences that promote diverse ways of feeling the educational, of initiating theoretical formulations, of counteracting or saving barriers and known deficiencies: technical training focused on disciplinary contents, thoughtless repetition of previous educational experiences, lack of support for the transition, standardized external tests for the classification of educational centers, inadequate working conditions for educational transformation, bureaucratization of teaching practice, hegemony of the textbook or, of course, individualism and reluctance to collaborative work between teachers.





Continuing with this idea, some of the spaces and actors of the educational systems from where innovative designs would emerge, so that innovation can be truly transformative, is the teaching staff as a community of interaction where research-action synergies occur. Any innovative action thus understood will subsequently have to be analyzed, debated and reorganized, in collaboration and joint feedback, so that complex systematicity replaces the simple linear vision. The permanence and continuous improvement of innovation depends on this. Jaume Carbonell (2015) focuses his attention on alternative proposals for educational innovation of the 21st century that, unlike the most relevant pedagogies of the previous century, are characterized by being generated and driven by educational networks, i.e., collectives where flows of exchange and collaboration are experienced. These are pedagogies that seek to improve the relations between the different educational actors, inside and outside the institutions, favoring a close collaboration and reciprocity with the territory and promoting processes of cooperation, participation and democratization in the educational institution. Bringing the institution closer to social reality, the educational process is sought to be stimulating and meaningful in the configuration of a free, responsible, creative, critical citizenship, balancing the participation of all dimensions of the person.

Likewise, Pozuelos *et al.* (2010) mention some characteristics of educational institutions and networks of educational actors that are carrying out silent innovation: illusion and hope; slow and constant pace; integration of contents that go beyond the basic subjects; construction of homogeneous collectives; presence of shared leadership and collaborative work; reflection and research process that transform their own educational reality; complementarity of practical and critical knowledge; openness to school and the community; presence and participation of diverse professionals and experts in the processes of the center.

In order for the innovative educational process to be carried out, it is necessary that people are involved and are protagonists of the experiences (Michavila, 2009), that spaces of coexistence are created for the feedback and evaluation of the community interventions involved (Marcelín Alvarado, 2023), that capacities are fostered to put knowledge, skills, attitudes and values into play; i.e., an amalgam of competences that, while fulfilling a function for the solution of real situations, continue their course towards their strengthening and extension to new contexts and approaches.

To avoid new proposals falling into dogmatisms or simplifications, it is necessary to approach educational innovation from a critical and analytical point of view, which problematizes the need and suitability of

this type of practices to achieve learning, well-being and personal and social transformation. For this reason, it is considered essential to relate dialectically two poles or complementary aspects of the problem: on the one hand, the criticism of educational innovation as only implementation of novelties at the level of materials, techniques and procedures at the service of the market, without substantive challenges of the hegemonic model and without being linked to a teaching ethical commitment, nor to a transformation of the unjust and unequal social reality; on the other hand, an analytical clarification that tries to delineate, from limitations and barriers, the criteria, conditions and demands that would make the desire for change an authentic transformative, democratizing, emancipatory, inclusive and participatory innovation (Martínez Bonafé, 2008; Rogero Anaya, 2016; García Gómez & Escudero 2021; Díez Gutiérrez *et al.*, 2023; Hargreaves, 2022).

As a counterpoint, it is important to review experiences in contexts located from silent proposals but committed to social environments that give meaning to the renovation projects of educational centers, which can put us on notice of an opening to encounter with already acting processes that are truly innovative. This does not omit the fact that they were originally encouraged by this “innovative fever promoted from above” (Rogero Anaya, 2016, p. 7) and does not exclude that coming from the business environment —such as the most recent active learning methodologies— they are creatively resignified in transformative education practices.

Although active learning is still not a widespread reality in higher education today, there is no shortage of studies that have been demonstrating its short- and long-term benefits. Some studies have found positive consequences in the improvement of strategies and approaches to learning in university students (Barboyon Combey & Gargallo López, 2022), as well as higher performances in academic performance: final grades, terminal efficiency of the subject and competence development (García Merino *et al.*, 2016; Pino & Fernández, 2016; Carcelén, 2019; Deslauriers *et al.*, 2019). Also the results of Robledo *et al.* (2015) suggest that those active methodologies with greater demand, activity and autonomy of students promote the development of their competences. Moreover, innovation with social consequences has also been demonstrated, for example, in Theobald *et al.* (2020), who conclude that in environments where activism is promoted, the performance and permanence gaps between university students, members of minorities and the rest of the group are exponentially reduced, being especially significant in STEM subjects. Increasing success in learning requires that students spend most of their



time solving complex and meaningful tasks; that they live a culture of inclusion that provides the necessary supports to young people with specific needs; that they immediately feed back and thus transfer genuine interest and confidence in their chances of success to students (Theobald *et al.*, 2020).

Below, we briefly present some of the active methodologies, emphasizing their characteristics to promote the design of educational innovations aimed at addressing the curriculum in an integrated way, to promote globalized learning and to stimulate the degree of participation, commitment and learning:

- *Service-learning*: methodology that promotes the development of social and civic competences through the service to the community that students perform based on their academic training. The purpose is to raise awareness and responsibility of the educational community about its role in the transformation and improvement of the environment (Martínez *et al.*, 2018), making learning a consequence and at the same time a means for it. It is characterized by promoting proactivity, cooperation, problematization, relationship, reflection and transformation (Martínez Usarralde, 2014; Santos Rego *et al.*, 2015 in Álvarez Castillo *et al.*, 2017). This methodology has proven its usefulness, both in the advancement of learning and in the attention to social needs, while increasing the networks of collaboration and co-responsibility, so necessary in contexts of growing tension and inequality.
- *Problem-based learning*: problematic situations are a powerful tool for learning, as they arouse interest and curiosity to understand and respond to the situation posed, favoring motivation, involvement and commitment throughout phases that lead participants to meaningful learning. This methodology has been widely used since the 1960s, especially in health studies, having as its main advantages the relevance of training related to current problems, increasing motivation and responsibility for learning (Jones, 2006).
- *Project-based learning*: it is based on the questions of students about different facts, phenomena and needs of their social environment. Taking advantage of their interest and motivation, the involvement of students in a systematic and at the same time flexible process is favored, which includes different expe-



riences, tasks and educational productions aimed at answering their questions and producing a result, which usually consists of a tangible object to solve a particular need or problem (Pozuelos & García, 2020).

- *Challenge-based learning*: it is the most recent proposal that brings together the best of the previous ones; it allows to pose a problematic situation or challenge to generate a complex and totalizing design about how to achieve the solution through learning and practicing different competences. The selected challenge relates to real social needs in the context of students, so that the dynamic innovation process that is launched makes effective the characteristics of the innovation necessary for the 21st century: relationship with the needs of the context, link between people and institutions, significance of experiences, involvement and shared practice of complex competences. This learning is relevant to respond to the central interest of this work about the need to critically address the notion of innovation and its role in the educational field, since this method has gone from being a concept coined by a multimillion-dollar technology company (Apple), to be a methodology whose application in higher education is growing. We agree with Leijon *et al.* (2021, p. 616) in the idea that when this approach is used as a framework for educational interventions and not for social impact, a central component of this methodology is lost. Even if the latter may be the hardest aspect to push, higher education institutions as promoters of knowledge in a learning society that should accept the challenge.

University and activism in higher education

In our current societies, it is increasingly necessary for university professionals to act competently, responding ethically to the great challenges they face, both global and local. For this reason, and without excluding other innovative strategies oriented by similar commitments, the pedagogical reform proposal based on active methodologies could offer adequate tools to address the mentioned threats, as they would act as enhancers of the active involvement of students to address real situations, many of them problematic (Arruda *et al.*, 2017).



Through these methodologies, it is intended to build a series of experiences in which the student is at the center of the process (Gutiérrez Pozo, 2023), involving himself individually and in groups in each of the phases, building meanings to respond to a need or the resolution of a situation that awakens his interest and motivation (Silva & Maturana, 2017). There are several techniques and resources possible for the strengthening and diversification of the proposed activities (problems, projects, services, challenges) in order to meet the needs of young people and the community, encouraging the interest and involvement of participants in decision-making and the development of tasks, being able to count on the support of ICT as facilitators of communication, search and management of information, as well as the creation of responses with digital means. It is worth emphasizing the proposal to conceive active methodologies from their link with the wide tradition of pedagogical renewal that precedes it (Marín Ibáñez, 1976; Rodríguez, 2000; Luelmo del Castillo, 2018) to think and test their acclimatization to the complex and changing premises. From this dialectical position (Reboul, 2009, p. 17) which assumes the tension between continuity and rupture, we can think of educational innovation and proposals for active methodologies as a more complex and committed process than that which would offer us its single location in the techno-scientific paradigm and the linear model.

Rodríguez (2000) proposes that the permanent failure of educational innovation through the implementation of activism in education has as its main factor the diffusion of active models through passive mechanisms, such as pure perception, reading and request for faith by those who must put it into practice inside and outside the classroom. Again, it is necessary to involve the faculty in decision-making, as well as participation in real experiences in which the results of these actions are felt and assumed, after negotiation processes, as benefits for all involved. Another aspect that can reinforce the creation and proliferation of educational spaces and environments conducive to the generalization of educational activism is to eradicate the emphasis on individual measurable benefits as the goal of learning. In line with the proposed social shift of the innovation paradigm, the emphasis on the collective, as a determining factor for human well-being, should regulate innovative discourses and practices in education. It is a question of looking back at the axiological horizon of formation, especially university education: society and personal autonomy. The latter only makes sense in the space of social interaction, where it develops and progresses morally and materially, and which serves from its professional competencies. This means putting at the center

the value of educational innovation as a key component to achieve university commitment to social improvement. Likewise, strengthening the critical and complex view on the phenomenon of education from the social, anthropological and philosophical must contribute to construct the sense and moral motivation necessary to weave the networks of human relations and shared commitments that enable the type of innovation that can be authentically transformative.

Some conclusions

Just as the generic concept of innovation has evolved towards a systemic model that understands that the innovative impulse originates from complex interactions between individuals, organizations and operating environments (Echeverría & Merino, 2011), we understand that theoretical and practical efforts must converge so that educational innovation follows this same socializing course, with more participatory, interdisciplinary and practical educational models (Michavila, 2009). Many challenges remain for educational innovation to meet, as proposed by UNESCO, the ambitious perspectives placed on its transformative potential towards a sustainable and more humane collective future. But this task cannot be approached with solvency and legitimacy if the treatment and response to substantive and radical questions is avoided for the purposes of education and, particularly, for the complex condition of the idea of innovation and the values that mobilize it in the field of education. However, “philosophical reflection on innovation is still in its infancy” (Blok, 2021, p. 74). Taking on this difficulty, we have tried to contribute with this work to the ongoing collective effort that seeks to respond to this theoretical lack in the field of innovation studies, but also understanding that reflection must be opened to the problematic encounter with its pretension to give foundation to innovative practices, and that it must critically reverse itself in function of the results operating in the interests of this social transformation.

One of the strengths of this work has therefore been to advance in the effort to build a philosophy of educational innovation that can find spaces of practical-methodological operability in pedagogical activism and in the most recent active learning methodologies. Education, as part of civil society and as a meeting place for different social actors (including scientists, organizations, companies...) can play a leading role in generating and driving innovations necessary for social change. A space of complex interactions in which, thanks to active learning and the



methodologies related to it, only educational is transcended to contribute to the clarification and development of innovations that generate social capital (Lundström *et al.*, 2017). This would be a real change in the paradigm of innovation, which would be in line with an education that would assume the ambitious achievements that Modernity entrusted to it and to which perhaps, despite failures and difficulties, and less now than ever, it should not give up. Education would be considered not only as one more area of innovation, but as that basic force that stimulates, energizes and sustains the innovations that 21st century societies, democratic, pluralistic and intercultural need.

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Declaration of Authorship - Taxonomy CRediT	
Authors	Contributions
Romina Denise Jasso Vicente de Jesús Fernández Mora Antonio Daniel García Rojas	<ul style="list-style-type: none">• Conceptualization: formulation or evolution of the general objectives and goals of research.• Working methodology and proposal of the structure.• Formal analysis.• Investigation process.• Visualization and preparation: creation and/or presentation of the published work.• Drafting of the original draft: preparation, creation and/or presentation of the published work, specifically the drafting of the initial draft.• Writing, review and editing: preparation, creation and/or presentation of the work published by the members of the original research group, specifically critical review, comment or review.

Artificial Intelligence Use Statement
Romina Denise Jasso, Vicente de Jesús Fernández Mora and Antonio Daniel García Rojas, DECLARE that the elaboration of the article <i>Critical perspective of educational innovation and active learning methodologies</i> , did not have the support of Artificial Intelligence (AI).

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