



REVIEW

## Curricular innovation in the knowledge society

### La innovación curricular en la sociedad del conocimiento

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**Cite as:** Amelia Simeoni I, Caballero R, Lepez CO. Curricular innovation in the knowledge society. *Seminars in Medical Writing and Education*. 2024;3:58. <https://doi.org/10.56294/mw202458>

**Submitted:** 01-11-2023

**Revised:** 04-01-2023

**Accepted:** 09-02-2024

**Published:** 10-02-2024

**Editor:** Dr. José Alejandro Rodríguez-Pérez 

**Translated by:** Cristhian Alejandro Pérez Pacheco 

#### ABSTRACT

**Introduction:** the problematization of the phenomenon of curricular innovation has been approached by research in the international and local context and confronting positions have emerged around the curriculum; and in order to make effective the transformation in the educational field and in a peculiar way in the decisions of the Curriculum, it is necessary to assume policies of change in the educational management. The objective of this work focuses on the characterization, reflection and theoretical deepening of curricular innovation within the framework of the knowledge and information society.

**Methods:** qualitative-hermeneutic, narrative and exploratory study based on literature review.

**Results:** the concept of curriculum is polysemic, with numerous definitions that indicate the richness of this concept and also the difficulty of its study; Furthermore, the need to think from a curricular vision the principles for educational innovation and as a model of socio-political transformation in decision making as a contribution to the culture of peoples, promoting the search for and production of knowledge, and that as a collective process the emergence of the knowledge society will require, among other things, reflection and practices on the effective conditions of possibility of its social, political and economic nature through appropriate educational policies that need to be elucidated and explored collectively as a challenge of Curricular Innovation.

**Conclusions:** in relation to the phenomenon of curricular innovation and based on the bibliographic exploration, a series of descriptive studies emerged that problematize the subject from an analysis of the local reality, therefore many questions remain to be asked regarding curricular innovation such as: what is the most important and substantive change in the curriculum, how does the innovative intention of the curriculum originate, how should one proceed in the search for curricular innovation, how is the innovative intention of the curriculum transmitted to the political levels?

**Keywords:** Curricular Innovation; Knowledge Society; Higher Education; Nursing; Health Sciences.

#### RESUMEN

**Introducción:** la problematización del fenómeno innovación curricular ha sido abordada por investigaciones en el contexto internacional y local y en torno al currículo han surgido posturas enfrentadas; y para efectivizarse la transformación en el ámbito educativo y de modo peculiar en las decisiones del Curriculum es menester asumir políticas de cambio en la gestión educativa. El objetivo del trabajo se centra en la caracterización, reflexión y profundización teórica de la innovación curricular en el marco de la sociedad del conocimiento e información.

**Métodos:** estudio cualitativo-hermenéutico, de carácter narrativo y exploratorio basado en la revisión de literatura.

**Resultados:** el concepto curriculum es polisémico, con numerosas definiciones que indican la riqueza de este concepto y también la dificultad de su estudio; además la necesidad de pensar desde una visión curricular los principios para la innovación educativa y como modelo de transformación socio-política en la toma de decisiones en tanto contribución a la cultura de los pueblos, promoviendo la búsqueda y producción del conocimiento, y que como proceso colectivo la emergencia de la sociedad del conocimiento requerirá entre otras cosas de la reflexión y las prácticas sobre las condiciones efectivas de posibilidad de su naturaleza social, política y económica mediante adecuadas políticas educativas que requieren ser elucidadas y exploradas colectivamente como desafío de la Innovación Curricular.

**Conclusiones:** con relación al fenómeno innovación curricular y en base a la exploración bibliográfica surgieron una serie de estudios de carácter descriptivos que problematizan la temática desde un análisis de la realidad local, por tanto quedan muchas preguntas por hacer respecto de la innovación curricular como: ¿cuál es el cambio más importante y sustantivo en el curriculum?, ¿cómo se origina la intención innovadora del curriculum?, ¿cómo se debe proceder en la búsqueda de la innovación curricular?, ¿cómo se transmite hacia los planos políticos la intención innovadora del curriculum?

**Palabras clave:** Innovación Curricular; Sociedad del Conocimiento; Educación Superior; Enfermería; Ciencias de la Salud.

## INTRODUCTION

In the first instance, it is imperative to consider that the present elaboration constitutes an analysis of the theme “Curricular Innovation”, meaning it involves addressing the Curriculum in its various constitutive aspects.

The rationality and epistemological reductionism that exacerbated the frequent changes in human life and the swift development of science and technology have contributed to the rise of scientific-cultural thoughts that influence the philosophy of life in society and its relationship with the pressing world around it.

Given the challenges currently posed by the need to bring about profound changes in the educational reality, it is of collective interest to inquire about the phenomenon of curricular innovation, as it contributes to addressing, from a global and integrative perspective, those issues of knowledge and learning that a society requires.

The problematization of the curricular innovation phenomenon has been addressed by research in both international and local contexts. Divergent positions have emerged regarding the curriculum, as exposed by Gimeno S, who asserts that such proposals represent “a project of citizen socialization, the opportunity, and the intention to establish the foundations of a common culture for every social group that strengthens its cohesion basis”. Meanwhile, Apple M posits that the curriculum is “a mechanism for political control of knowledge, highlighting and sustaining socio-cultural differences”.<sup>(1)</sup>

The state of the art regarding the study topic, its nature, and the way knowledge in the field is being applied, considering the research findings related to the subject, as well as the demand for conceptual and theoretical frameworks, are influential factors driving the imperative for innovation within education.

Therefore, in order to materialize the transformation in the educational field, particularly in curriculum decisions, it is necessary to embrace policies of change in educational management, where “institutional change can be seen as a succession of change situations, organized in a chain, and growing in a spiral”.<sup>(2)</sup>

The objective of the work focuses on the characterization, reflection, and theoretical deepening of curricular innovation within the framework of the knowledge and information society.

## METHODS

Qualitative-hermeneutic, narrative and exploratory study based on literature review.

## RESULTS

The concept of curriculum is polysemic, with numerous definitions that indicate the richness of this concept and also the difficulty of its study. According to Gimeno Sacristán, there are five major orientations that group together the diverse conceptualizations of the curriculum:<sup>(3)</sup>

- As an organized structure of knowledge: it emphasizes the transmitting function of school education.
- As a technological production system: it is reduced to a document specifying outcomes. The outcome of the curriculum is the preparation for carrying out professional and social activities, and the contents of the curriculum encompass all the cultural richness of a community considered appropriate for its survival.
- As an instructional plan: defined as a document that plans learning.

- As a set of learning experiences: those undertaken by students under the guidance of the school or teacher.
- As problem-solving: it considers that the curriculum must focus on practice, oriented towards problem-solving.

However, the conceptual approach obtained from this way of conceiving the curriculum implies a review and deepening of its descriptive issue and necessitates another analytical reading and interpretation. Therefore, considering Stenhouse L<sup>(4)</sup>, who presents a theoretical-practical problematizing thought; he suggests that the study of the curriculum concerns the relationship between its two meanings: intention and reality. Stenhouse also asserts that the central issue in its thematic approach is the existing gap between our ideas and aspirations, and our attempts to operationalize them.

Stenhouse L regards the term curriculum as *an attempt to communicate the essential principles and features of an educational purpose, in such a way that it remains open to critical discussion and can be effectively translated into practice.*<sup>(4)</sup> For this reason, the curriculum is the means through which the consistent experience of attempting to implement an educational proposal becomes publicly available. Likewise, it implies not only content but also method and takes into account the challenge of its implementation in educational institutions.

<sup>(4)</sup> And finally, at least, a curriculum must provide a basis for: a) planning a course, b) studying it empirically, and c) considering the reasons for its justification regarding its intentionality and flexibility to investigative criticism.<sup>(4)</sup>

However, in order to understand the proposed topic, it is relevant to consider knowledge as a phenomenon of innovation in contemporary education. Is there a specific profile for the innovator, or are several complementary profiles needed to innovate?<sup>(5)</sup>

Often, we associate the profile of an innovator with the idea that to be one, specific and unique qualities related to creativity are necessary to possess. The association of innovation with new ideas linked to new objects or devices is a traditional mental framework, but increasingly distant from reality. Innovation is a long journey that goes from the idea to popular success. *The necessary journey to achieve success is surrounded by a multitude of problems not only related to the creativity of the original idea but above all to practical decision-making and selection of exchange options.* Therefore, it is necessary to be prepared to make changes well at the different steps and problems presented by the innovation process.<sup>(5)</sup>

Hence, this approach underscores the need to think from a curricular standpoint about the principles for educational innovation and as a model of socio-political transformation in decision-making, while contributing to the culture of peoples, promoting the search and production of knowledge. Events have demonstrated that the factors determining the advancement of innovation are many and diverse, forming a space of innovation where initiatives of innovative nature are born, take shape, transform, and die. This holistic nature of innovation makes it a process that is not easy to observe either at the moment of its birth or in the trajectory in which it subsequently takes shape and develops. These conditions are directly related to personal motivation, the desire for autonomy, socio-financial support, and a socio-institutional environment, with a need and opportunity to apply what is new.<sup>(6,7,8,9)</sup>

This reflection should underscore the idea that innovation is not confined to certain technical departments or even to those who are in charge of managing innovation projects. Instead, it is a collective attitude about seizing opportunities to change and improve existing conditions, and, above all, to develop new initiatives.<sup>(10,11,12,13)</sup>

Therefore, the necessity to acquire knowledge for living is a challenge for contemporary societies.<sup>(6)</sup> Presently, the term “knowledge society”<sup>(14,15,16)</sup> may convey the impression of being complicit in a trend typically propelled by educational programs that perceive themselves as avant-garde, pragmatic, and oriented toward productivity. Nevertheless, regardless of whether it is a trend or not, the “knowledge society” does not yet fully exist, although it is certainly an expectation for the near future that is articulated in many institutional sectors.

There is no doubt that knowledge, with the development of science and technology, has reached unprecedented economic and cultural prominence, and through them, the dynamics of educational production will continue to undergo significant modifications. Like any collective process, the emergence of the knowledge society will require, among other things, reflection and practices on the effective conditions of possibility of its social, political, and economic nature. And in alignment with this, there is a collective will to construct a subject relevant to the challenges of this emerging society, through adequate educational policies, which need to be elucidated and collectively explored, posing a challenge for Curricular Innovation.

## FINAL CONSIDERATIONS

Regarding the phenomenon of curricular innovation, and based on the bibliographic exploration, a series of descriptive studies have emerged that problematize the subject through an analysis of the local reality.

At the National University of Colombia, Gómez Campo V and Celis Giraldo E postulate that the process of

curriculum organization and definition is determined by four important vectors of change.<sup>(17,18,19)</sup>

Firstly, they point out that some trends in the world of work significantly affect the criteria for curriculum definition and design. The emergence of the so-called knowledge and information society and the service economy implies increasing complexity in the production of goods and services. All these new phenomena in the world of work question curriculum criteria based on assumptions of specific occupational profiles or performances. They also pose the necessity for new criteria that lead to revaluing the curricular role and importance of fostering general competencies, even within the most specialized study programs.<sup>(20)</sup>

On the other hand, they suggest a second factor of change in curricular conceptions is related to new forms and trends of organization, differentiation, identity, and delimitation of knowledge. Many disciplines, professions, and fields of knowledge are currently subject to significant tensions and questioning derived from the emergence of new hybrid or transdisciplinary fields, which subsume and recontextualize traditional disciplinary knowledge and offer new compositions, demarcations, limits, and identities among various fields of knowledge.<sup>(21,22)</sup>

A third significant factor of change in curricular conceptions and practices is comprised of the new and immense possibilities for creating new forms of learning generated by the new information and communication technologies. These technologies offer the potential to flexibilize the provision of learning opportunities to students, with educational outcomes or achievements being primarily determined by their autonomy and responsibility.<sup>(23,24,25)</sup>

A fourth and final factor of curricular innovation is of a cultural nature, such as the growing value granted in the modern society to subjectivity, individualization, personal options, flexibility in educational experience, the possibility of changing areas of study, rather than homogenization, standardization, and rigidity, which are characteristics of highly structured and inflexible curriculum programs. In such programs, students are subjected to homogeneous educational experiences, evaluations, and achievement expectations, without consideration for their interests, abilities, and learning styles or manners.<sup>(26)</sup>

While in Cuba, Cuba Horruitiner Silva P considers the need to understand the challenge of curricular transformation as a complex process and posits the need to characterize the curriculum as a whole. He distinguishes the term “curriculum design” as merely a stage, a moment of a much broader instance, which is curricular transformation. The author prefers to use this term because it provides a clearer and more comprehensive vision of the idea he wants to convey. He then suggests that the process of curriculum change goes through different stages, each of which characterizes an aspect of the process as a whole. These stages fundamentally include preparation, design, implementation, and evaluation.<sup>(15,27)</sup>

In Cuban higher education, it was understood that curricular transformation is a continuous process, beginning with teacher preparation and not ending with design but continuing through its implementation and evaluation. This process may, in turn, lead to the development of new curricula.<sup>(8)</sup>

In this conception of curricular transformation as a continuous process, it is possible to identify two qualitatively different levels: the first of them is the one that occurs as a result of the application of a curriculum in practice. The second level is associated with more significant changes, where the demanded transformations exceed the curricular framework; consequently, a new process of curricular transformation must take place, repeating the cycle of preparation-design-application-evaluation.<sup>(28)</sup>

Finally, the author posits that the process of curricular transformation is based on a close relationship with society and entails determining: the priorities of economic and social development; the main sources of employment; scientific and technological advances; and the connections with postgraduate activities.<sup>(8)</sup>

On the other hand, implementing theories into reality becomes imperative to generate innovation in the curriculum field. In this regard, Avilés Garay E. argues that combining theory with practice is an ideal in Curricular Theories, and that if serious progress is made toward this goal in the curriculum, it is necessary to recognize certain basic steps, such as: reading the literature; identifying key terms; verifying the accuracy of existing theories; avoiding novelties; aligning theory with practice; testing the theory; interpreting the theory; and modifying and simplifying the theory. It is necessary to delve into the theory that can be used as a means of communication among individuals and serves as a guideline for those interested in studying the curriculum field in order to provoke curriculum changes that a particular society requires.<sup>(26)</sup>

Similarly, Magendzo A. state that curriculum theory accounts for the nature of the curriculum, a subject on which curriculum developers cannot remain indifferent, requiring them to take a stance on a series of significant elements. Thus, a point of view on knowledge underlies curriculum conception, named “epistemological position”. Likewise, concerning the relationship education establishes with society and its transformation, termed “social position”; and also regarding learning and the teacher-student role, referred to as the “psychopedagogical position”. Subsequently, substantive considerations about values, freedom, experience, culture, past, present, and future are contemplated from an “axiological standpoint”.<sup>(10)</sup>

In consequence, many questions regarding curricular innovation remain unanswered, such as: What is the most important and substantive change in the curriculum? How does the innovative intention of the curriculum

originate? How should one proceed in the search for curricular innovation? How is the innovative intention of the curriculum transmitted to political spheres?

And finally, we could discuss an innumerable list of questions related to the topic. However, human beings, in their intrinsic nature, present a challenge of continuous transformation that can occur simultaneously with processes in education within a framework of curricular innovation.

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#### **FINANCING**

The authors received no funding for the development of this research.

#### **CONFLICT OF INTEREST**

The authors declare that there is no conflict of interest.

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