



Revisiting the Competency-Based Paradigm in Primary Education: Unpacking the Spiral Curriculum Approach

Johana Muñoz-López
University of Granada, Spain, johanaml@ugr.es

Susana Fernández-Larragueta
University of Almería, Spain, sfernán@ual.es

Key competencies have become central to international education policy, driving curriculum reform since the early 21st century. This trend continues through initiatives such as STEAM and policy guidance from the OECD, which promote the development of competency-based, high-quality education systems. This study explores the ideological and pedagogical framework of Spain's Primary Education system through a case study conducted within a naturalistic-interpretative paradigm in the Region of Murcia, one of the first autonomous communities to implement competency-based education. Data were collected through document analysis and semi-structured interviews with teachers in various roles and educational inspectors. The research process included collaborative report development and expert triangulation to ensure validity and rigor. Findings reveal persistent epistemological ambiguities in defining key competences, as well as tensions between behaviorist-economic and constructivist-humanistic approaches to implementation. The study concludes that successfully enacting competency-based education in Spain requires not only curricular alignment but also greater epistemological and pedagogical coherence.

Keywords: primary education, key competences, teaching actions, inclusion, curriculum, Spain

INTRODUCTION

The socio-political and cultural transformations driven by globalization and rapid technological advancement have garnered growing attention in educational research. This evolving context necessitates a critical examination of current practices to address pressing socio-educational challenges and to inform the deliberate reorganization of school systems (García-Fuentes et al., 2023). This imperative urges a rethinking of the “classical cultural paradigm in order to build a curriculum suited to the knowledge society” (Fernández-Sierra, 2011, p. 69), while simultaneously reinforcing the foundations of a democratic, deliberative, and inclusive society (Habermas, 2005).

Within this discourse, key competencies have emerged as an emblem of international educational transformation. This paradigm is embedded in the influential 2030 Agenda,

Citation: Muñoz-López, J., & Fernández-Larragueta, S. (2026). Revisiting the competency-based paradigm in primary education: Unpacking the spiral curriculum approach. *International Journal of Instruction*, 19(1), 419-436. <https://doi.org/10.29333/iji.2026.19121a>

where education is a foundational pillar of the Sustainable Development Goals (SDGs), notably Goal 4: “Ensure inclusive, equitable, and quality education and promote lifelong learning opportunities for all”, supported by detailed targets. Notably, Target 4.4 emphasizes equipping youth and adults with the competencies—particularly technical and vocational skills—needed to access decent employment and engage in entrepreneurial activities.

This new paradigm requires education systems to navigate a transition from the logic of human capital theory to a model based on competency-based knowledge, a shift that diverges significantly from traditional training approaches focused on predefined tasks (Nevado-Luna et al., 2025; Pérez-Gómez, 2018; Torres-Santomé, 2017). However, despite its widespread implementation, Competency-Based Education (CBE) is often marked by an ambiguous epistemological foundation, which poses significant challenges to its integration into national curricula, due to the diversity of pedagogical interpretations it can generate.

The origins of CBE can be traced back to the 1970s, with the development of Competency-Based Teacher Training (CBTT) programs in the United States. These initiatives aimed to align the training of education professionals with the skills demanded by the labor market (De la Orden Hoz, 2011; López-Gómez, 2016; Pérez-Gómez, 2007; Ramírez-García, 2016). CBE thus reflects a technocratic orientation, aligning with behaviorist learning theories that reduced knowledge to observable behaviors and define educational success in terms of task performance. Within this framework, CBE emphasizes measurable outcomes, often neglecting the cognitive and reflective processes involved in learning. This emphasis aligns with what has traditionally been called objectives-based pedagogy (Pérez-Gómez, 2012).

The alignment of CBE with objectives-based pedagogy tends to reduce “competencies” to a checklist of behaviors students are expected to display in preparation for their roles in the workforce. This reductionist view resonates with the legacy of Taylorism and Fordism, embedded in the managerial ideology of Total Quality Management (TQM) (García-Díéguez & Ladenheim, 2020). One significant reference in this development is the SCANS Report—produced by the Secretary’s Commission on Achieving Necessary Skills in the U.S. (Coople et al., 1993)—which identified and categorized key competencies for school and work environments. This initiative reflected a growing disillusionment with vocational training’s economic effectiveness and reinforced the connection between education and neoliberal economic policies.

In this context, international organizations, particularly the Organization for Economic Cooperation and Development (OECD), took on a prominent role in promoting competency-based approaches. In 1997, the OECD launched the project “Definition and Selection of Competencies: Theoretical and Conceptual Foundations” (DeSeCo), aimed at identifying the key competencies required for individuals to achieve personal, social, and economic well-being in the knowledge society (OECD, 2003). DeSeCo laid the theoretical groundwork for subsequent educational reforms across member countries and established competencies as a global benchmark for educational quality and equity.

DeSeCo (2003) categorizes key competencies into three broad domains: interactive tool use, collaboration in heterogeneous groups, and autonomous action. These categories are interrelated yet distinct. This initiative provides a foundational understanding of competencies, which Pérez-Gómez (2007) regards as one of the first epistemic contextualization, giving rise to a new competency paradigm that critically reconsiders the purpose and rationale of education. It challenges the behaviorist competency paradigm and strengthens a constructivist approach, where key competencies are defined as 'a set of attitudes, skills, values and emotions required by individuals to navigate everyday situations' (DeSeCo, 2003). In this context, competencies are linked to task execution within specific situations, with the application of knowledge and skills in solving problems serving as indicators of competency acquisition, thus departing from the technocratic-behaviorist curricular approach (Martín-Romera et al., 2023; Olle-ten, 2017).

This association ultimately centralizes hegemonic powers, as the OECD, through the new meaning attributed to Competency-Based Education (CBE) in the DeSeCo initiative, upholds a rationalist model of assessment. This model is grounded in behaviorist learning theories, such as Bloom's taxonomy, and epitomized in its prominent tools: the Programme for International Student Assessment (PISA) (Pérez-Gómez, 2018).

Following this development, most OECD member countries began exploring how to address emerging social needs in their school systems through competencies, especially as they were also subject to external assessments by the OECD. This concern also attracted the European Union (EU), culminating in the 2006 parliamentary resolution titled *Recommendation of the European Parliament and of the Council on Key Competences for Lifelong Learning*. The aim was to establish a common framework so that all EU countries would have unified tools to address the emerging challenges of globalization and knowledge-based economies.

The outcome is a unified guide for all EU countries: 'Key Competences for Lifelong Learning – European Reference Framework,' hereinafter referred to as the 'Reference Framework' (Official Journal of the European Union, 2006). This document outlines the key competences essential for personal fulfilment, development, active citizenship, social inclusion, and employment (Official Journal of the European Union, 2006). Notably, in selecting these key competencies, the EU considered European reference levels (benchmarks), which serve as indicators of commitment to improving average performance, closely tied to international external assessments conducted by the OECD, such as PISA (Official Journal of the European Union, 2006).

This 'reference framework' was intended to guide EU member countries in implementing education and training programs. It was first introduced in Spain through the Organic Law 2/2006, of May 2, 2006, on Education (LOE, 2006). Although the inclusion of competencies began in the early 21st century, it was not until nearly a decade later that it reached its full potential. This came with research initiatives like the Key Competence Network on School Education (KeyCoNeT, 2014), which gathered recommendations to strengthen the development of key competencies, both in

legislation and practice. The consolidation of key competencies in the Spanish education system culminated with the Organic Law 8/2013, of December 9, 2013, for the Improvement of Educational Quality (LOMCE, 2013), following a model similar to the OECD's, where national external rationalistic evaluation models assess key competencies.

After a decade of continuity in the Spanish school system with the pioneering competency project under the LOMCE (2013), the new Organic Law 3/2020, of December 29, was enacted, amending Organic Law 2/2006, of May 3, on Education (LOMLOE, 2020). This law introduces a refreshed competency framework, incorporating a specific branch that has gained international attention: STEAM (English, 2016; Perignat and Katz Buonincontro, 2018; Tan Hoi, 2021; Vasquez et al., 2013). However, according to the official schedule set by the Ministry of Education and Vocational Training, the Spanish education system completed a phase of legislative and practical transition during the 2023/2024 academic year. The current school year marks the start of the new LOMLOE competency project, implemented uniformly across all Primary Education grades.

Considering the importance of key competencies in the global educational landscape, this study explores their implementation in Spain, with a focus on the competency framework introduced by the LOMCE (2013), which remains a cornerstone of the Spanish education system due to the ongoing transition phase. Specifically, the research focuses on one of the Autonomous Communities (CC.AA.) that aligns most closely, ideologically and pedagogically, with the LOMCE (2013): the Region of Murcia (CARM). The objective is to investigate how key competencies have been addressed at the Primary Education level, how they have been integrated into curricula, and the methodologies and assessment processes employed. The study also examines the socialization of teachers in the CARM regarding competency-based education and reflects on its potential impact on implementing the new competency paradigm promoted by the LOMLOE (2020) within the Spanish education system.

METHOD

This study follows a naturalistic-interpretive paradigm, enabling a deep understanding of the unique characteristics and contextual particularities of the Region of Murcia (CARM) regarding both the legislative adoption and practical implementation of key competencies at the Primary Education level. Insights are drawn from the diverse lived experiences of participants (Taylor & Bogdan, 2010). A research paradigm that allows us to understand and construct knowledge through the interconnection of all interpretations regarding each teacher's individual cultural socialization in relation to competency-based work, enabling us to delve into the particularities of the context under study. Thus, the way participants experience the world is examined, as what matters in this paradigm is exploring how reality is perceived (Taylor & Bogdan, 2010). Therefore, naturalistic-interpretative research designs are characterized by being flexible, open, and emergent, in order to explore the uniqueness of the dynamic context being investigated.

A qualitative case study design was used (Stake, 2010), as it is well-suited for exploring complex, context-dependent phenomena. Data were collected through semi-structured interviews and document analysis. This study is a combine the analysis from the doctoral dissertation “*Study on the Influence of External Institutional Evaluations in Primary Education on Teaching Practice: The Case of the Region of Murcia*” with the legislative analysis emerging from the Research Group Strengthening Project “*Analysis of External Evaluation Tests and Key Competencies in Primary Education as Measures for the Development of Educational Quality*” (PFONTGRUPOS _ 2023/35 (PPIT-UAL, Junta de Andalucía-ERDF2021-2027. Objective RSO1.1. Programme: 54.A.).

Before delving into the research instruments, participants in this case study were Primary Education teachers from the Region of Murcia (CARM), holding various educational roles (Table 1). To broaden the study’s scope, we employed the snowball sampling technique (Taylor & Bogdan, 2010). This strategy enabled the inclusion of diverse professionals, enriching the study with their varied experiences.

Table 1
Description of the participants in the case study

Professional Role	Number of participants
Education Inspectors	2
School Leadership Team	Principal
	Head of Studies
	School Secretary
Educational Therapists	5
Tutors	14
Subject Specialists	2
	29

Regarding the interviews, they were in-depth and semi-structured (Stake, 2010), which allowed us to approach each participants’ professional identity through reflections on their actions, practices and pedagogical thinking. This was achieved through repeated one-on-one sessions, each lasting at least an hour, enabling us to explore in depth and respond to the aims of our research. A key feature of semi-structured interviews is that, although a guiding script is followed to direct the conversations, the design of the questions is flexible enough to accommodate emerging topics the interviews, thereby enriching the dialogue. The interview questions were developed based on a set of thematic blocks related to teaching practice (such as attention to diversity, methodology, collaboration and/or coordination, assessment, activity design, use of materials, competency-based teaching, classroom organization, etc.). These themes helped us craft questions using accessible and familiar educational language, making the interview process more approachable and allowing the conversations to be formal yet fluid. Finally, all interviews were recorded, transcribed and discussed with participants. To ensure anonymity, pseudonyms were used.

The document analysis provides insight into the curricular specifications developed by the CARM to implement the competency project promoted by the LOMCE (2013). It also helps reconstruct participants’ experiences, as these documents reflect and shape the educational culture followed by schools. This supports a deeper understanding of

the dilemmas within the socialization process carried out by the educational community in the CARM (Goetz & Lecompte, 2010). A comprehensive review of national legislation was conducted, from the LOE (2006)—the first law to regulate basic competencies in Primary Education—to its partial amendment, the LOMCE (2013). This review includes all related curricular documents at both national and regional levels.

After completing data collection, we proceeded to content analysis to understand the regulation and application of key competencies in the classroom. For data analysis, we used the framework by Fernández-Sierra and Fernández-Larragueta (2013), which includes identifying emerging themes, designing pre-categories, initial coding, and drafting preliminary reports. These reports offer a forward-looking view of our research and allow us to return to the field if needed. Finally, themes are categorized, and reports are prepared for expert negotiation and triangulation to ensure the research's credibility, dependability, and confirmability (Guba, 2008). For the expert triangulation phase, professionals related to the topic and research paradigm were selected—specifically, researchers from different university. We used Nvivo 13 software to organize the data.

FINDINGS

Following data analysis and triangulation, three key themes emerged: (1) the implementation of the competency-based framework in the Region of Murcia (CARM), (2) design of methodological strategies for addressing key competencies, and (3) development of competency-related assessment procedures.

The Competency-Based Approach in the CARM: The aNota Program

The integration of key competencies in the Region of Murcia (CARM), as in other Spanish Autonomous Communities, prompted a rapid reorganization of school's internal structures. However, due to the region's ideological and political alignment with national education policy, this restructuring required minimal changes. A key example is Decree 198/2014 (September 5), which regulates the Primary Education curriculum in the CARM. Annex II maps each subject area to its corresponding key competencies, following the systematic alignment of knowledge, assessment criteria, and learning standards outlined in Order ECD/65/2015—a major reference for national curriculum policy.

To implement this behaviorist-aligned competency model, the CARM adapted the guidelines from Order ECD/65/2015 into its own institutional tool: the aNota program. Designed to support teachers in incorporating key competencies into daily instruction, aNota provides clear guidelines and instruments for systematic evaluation. From a neoliberal policy perspective, successful implementation of competency-based models relies on clearly defined evaluative parameters within the teaching-learning process. Accordingly, rationalist assessment frameworks inform aNota's design through indicators (Elliot, 1992), reformulated as “assessable learning standards”.

These assessable learning standards form the backbone of this neoliberal-technocratic curriculum, rooted in a behaviorist view of competencies. They define the core knowledge that students must acquire to be deemed competent for future occupational

roles, while also prescribing the personal, practical skills and attitudes needed for problem-solving. In this framework, competencies are often reduced to fragmented behavioural sequences or micro-skills aligned with economic productivity demands. This interpretation diverges sharply from constructivist, holistic, or ecological learning paradigms (Delors, 1996; Egido-Gálvez, 2011; Pérez-Gómez, 2007, 2013, 2018).

In its efforts to consolidate this approach, the CARM deployed aNota as part of a broader cultural standardization project aimed at promoting the consistent adoption of key competencies across schools. This was achieved through professional development programs focused on training teachers in the use of the aNota platform. However, this technical focus has marginalized reflective pedagogical practices. Many teachers have not fully adopted the transformative nature of the competency-based paradigm, instead relying on classificatory models of instruction and evaluation, which hinder the adoption of inquiry-based or action-research pedagogies (Elliot, 2010; Ortiz-Revilla & Adúriz-Bravo, 2021). Consequently, some educators retain a superficial understanding of key competencies, often reducing them to isolated tasks.

“There are sessions where we focus on competency-related activities. But honestly, I still don’t fully understand what competencies mean, even though we’re working on them. So, we try to approach it more broadly, perhaps through a text or project (...)" (Alejandra, tutor)

This limited conceptual understanding among teachers is linked to the structural design of the aNota platform. The system follows a linear, modular arrangement of curriculum components, with assessable learning standards as its core. aNota thus serves as an additional layer of curricular formalization, organized into four main modules: planning, assessment, grade reporting, and individual student reports (Figure 1).

Therefore, aNota becomes yet another curricular specification for teachers due to its internal structure, which is organized into four main sections: planning, grading, grade summary, and reports, as illustrated in Figure 1. Each of these sections is further subdivided into smaller components aimed at simplifying teachers’ work and, consequently, applying a systematization of curricular aligned with a technocratic-economic curricular approach.

The first section, Planning, consists of five interconnected phases, all subordinated to the initial phase—Standard Templates—which serves as the backbone for the design and selection of elements in the subsequent phases: Training Units, Sequencing, Tools, and Standard Tools. The second section, Grading, outlines the evaluation procedure to be followed, which can be visualized in three different formats: by standard, by student, and by the evaluation instruments selected for that grading process. The third section, Grade Summary, offers three formats for reviewing group performance: by group, by student, or for the entire course. Finally, the fourth section, Reports, can be generated in three formats: competency level reports, grading reports, and reports on the planning conducted.

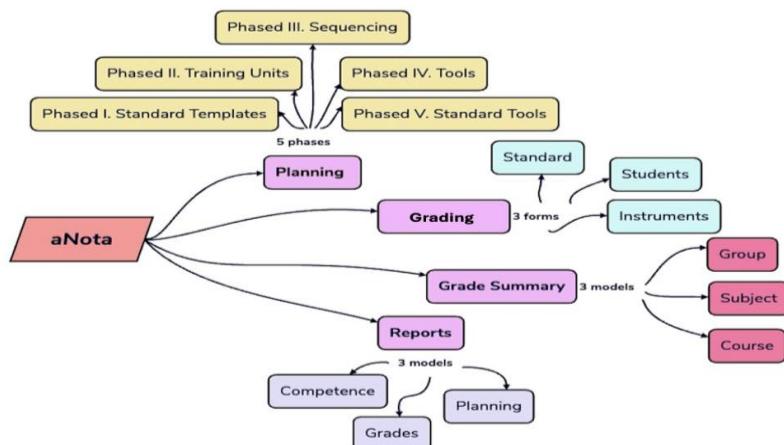


Figure 1

Structure of the aNota program

Note: Own creation. Inspired by the software format.

One of the main components of the program is Planning, which simplifies the traditional planning process educators undertake at the start of the school year. This process outlines the content, methods, and reasons for these choices. However, the aNota Planning model, influenced by its neoliberal framework, organizes instructional planning into five phases to align with the behaviorist competency paradigm. This framework assesses key competencies through grading, in line with national external assessments that validate competency levels. Despite all external evaluations, including the national LOMCE (2013) assessments, using the Item Response Theory (IRT) for question formulation, it is the assessable learning standards that determine the questions asked. These standards specify the knowledge areas – knowing, doing, and being – that students must demonstrate. Thus, it is clear that the core of the Planning block is closely linked to these assessable learning standards, even naming the first phase of planning: Standard Templates.

As the name suggests, the Standard Templates structure presents the assessable learning standards for each knowledge area, organized according to the numerical sequence in Decree 198/2014, and linked to the evaluation criteria and curricular content. After classifying the standards, teachers assign a percentage to each, allowing aNota to automatically calculate the corresponding coefficient, reflecting the weight of each standard in the overall assessment. Teachers must also assign a grade to each standard and link it to one or two key competencies. Thus, the evaluable learning standards function as the equivalent of objectives in the technocratic curricular approach (Gimeno-Sacristán, 1997), minimizing the role of other curricular elements and making a constructivist competency-based paradigm unfeasible.

“(...) Now with the LOMCE, there are no longer objectives, contents or evaluation criteria—now it's all about standards. The standard is like the goal

the children must achieve, and each is related to one or more competencies (...)” (Noah, tutor)

A pedagogical perspective is imposed on the Murcia educational community through the program’s prioritization of specific curricular elements. An example of this is Phase II, titled “Formative Units.” This phase corresponds to didactic units but is rebranded as formative units within the program. This change reflects the overall simplification of teachers’ planning with aNota. Rather than requiring the inclusion of essential elements—such as content, activities, or methodology—teachers are only asked to provide superficial data to identify the formative unit, such as the title, dates, unit number, and session count. Teachers no longer detail curricular content in CARM classrooms but instead focus on specifying the learning standards, which have become the central element in activity design.

A new strategy for the teaching-learning process limits adaptation to the sociocultural context of the classrooms. Although the curriculum is essential for organizing teaching, most teachers find its use challenging due to the excessive number of learning standards. At times, the particularities of the classroom prevent addressing all standards within the selected trimester.

“(...) You have to review it, and keep in mind that you need to reintroduce it, right? Even if, for example, in the second trimester, you did not include those standards in the original plan, you still have to revisit them later, even if you can’t evaluate them then because they were part of the first. Still, they need to be covered so students are familiar with them (...)” (Candela, tutor)

This means that any task designed must meet all curriculum learning standards, taking into account the socio-educational realities teachers face. Within this framework, the constant monitoring of the neoliberal evaluation system creates guilt traps, designed to limit educational action and perpetuate teachers’ subjugation through feelings of guilt, ensuring compliance with accountability demands and bureaucratic controls (Hargreaves, 2005). As a result, planning design does not stem from a reflection and analysis of educational practices (Elliot, 2010) but rather from adapting the teaching program to the behaviorist competency paradigm, reinforcing the “one-size-fits-all” approach to the curriculum. This approach segregates student diversity and undermines the integrative nature of the Spanish educational system.

The Methodology of the Teaching-Learning Process for Work Competence in the CARM Context

The application of the behaviorist competency paradigm and the neoliberal evaluation system requires teaching strategies that facilitate its integration into educational institutions within the CARM context, extending beyond teaching for accountability. A general methodological framework is constructed to subjugate teachers, reducing their professionalism to the repetition of specific technical skills. This undermines their professional judgment when following the aNota program and fosters complacency and adaptation to the daily routines. Currently, strategies and activities are designed for specific, fixed moments, framed within the technocratic demands of the curriculum.

These strategies are distant from practical-emancipatory and socially critical approaches (Grundy, 1998), as well as from critical methodologies (Carbonell, 2019), focusing instead on meeting prescribed learning standards.

“(...) When scheduling activities, of course, you think: ‘Well, I’ll make use of any activity to cover a few standards.’ There is a constant need for evaluation and to record all those results (...)” (Emma, tutor).

Didactic practice is thus justified by its capacity to deliver specific, concrete, and short-term observable results for most students, rather than by strategies that promote collaboration and exchange within the classroom and institution. The focus should be on cultivating students’ civic and moral education, preparing them with the skills and competencies needed to participate in a democratic-deliberate society (Freinet, 1979).

Likewise, teachers are implicitly bound to instructional practices shaped by these evaluation models, assuming the role of mere technicians in the teaching-learning process. Their efforts focus on identifying strategies to meet externally imposed objectives. Consequently, the curricular development involved in designing teaching programs departs from the process-oriented model proposed by Stenhouse (2010), which emphasizes the ethical purpose of education. This model advocates for a practice based on critical analysis of pedagogical aims, turning them into procedural principles that inform classroom activities. In contrast, the curriculum adopts a standardized and homogenizing character, sidelining curricular justice and limiting adaptation of content and methods from an inclusive perspective aimed at cultivating a learning culture responsive to all students’ needs (García-Pastor, 2013).

A methodological framework is thus reinforced that perpetuates a diagnostic approach on the individual, promoting special measures that overlook students’ specific needs within the teaching-learning process. Rather than fostering genuine inclusion, these measures intensify segregation by signaling difference and managing those excluded by a homogenized curriculum. Such plans reinforce an educational discourse focused on learning difficulties (Ainscow, 2012). As a result, the deficit culture persists, driven by an economist’s logic rooted in the behaviorist competence-based model. This structure, critiqued by therapeutic pedagogues, limits inclusive classroom practices and restricts possibilities for truly individualized attention.

“(...) If there were no established curriculum at the community level, and if there were a working group where we could reflect on our objectives and standards, with a deep understanding of the students in the class—without time constraints and limitations—these are children with their strengths and weaknesses, I would promote this. But sometimes there is not enough time, because one must follow the prescribed path, which prevents addressing many capabilities (...)” (Ángela, PT).

Similarly, attention to diversity within this educational paradigm redefines teachers’ roles, as the responsibility for students with specific educational needs (ACNEAE and/or ACNEE) is often shifted to specialized teachers. This focus does not necessarily foster inclusive practices but rather highlights differences, labeling them based on their

difficulties in meeting standardized curricular requirements (Durán & Giné, 2011). Such an approach can challenge the allocation of time and resources to students who progress at a different pace, further exacerbated by the lack of a sensitive curricular perspective (García-Pastor, 2012). This situation sometimes leads to frustration, as specialized teachers (PTs) are subtly made to feel that these students are their sole responsibility, which contrasts with the general classroom teacher's broader duties. Such perceptions stem from the technocratic approach, which prioritizes covering learning standards over fostering meaningful teacher collaboration, thus hindering inclusive educational practices.

“(...) They seem frustrated, as if to say, ‘these children are yours’, and because you work with them for many hours each week, they’re perceived as your responsibility. But this is not about ownership—this is not shared custody. You have a class, and I provide support. However, these children, simply because they are labeled as students in Special Education or have special educational needs, are seen as the responsibility of the specialized teacher, who is expected to attend to them. I can help you—and offer substantial assistance—but there must be mutual feedback (...)” (Camar, PT).

Despite the prevailing model of individualized and segmented support, some PT specialists report experiences that diverge from this pattern, highlighting instances of constructive collaboration with classroom teachers. These efforts involve the joint design of strategies and shared responsibility for students with Specific Educational Needs (ACNEAE) and/or Special Educational Needs (ACNEE) throughout the teaching-learning process. While this marks progress in addressing diversity, it still falls short of achieving truly inclusive practices. The persistence of a behaviorist, competence-based curriculum sustains what Hargreaves (2005) terms “balkanized collaboration”—a fragmented form of cooperation that reinforces differentiated roles. Rather than fostering inclusivity, this model often results in segregated methods, isolating students unable to access the standardized curriculum. These students are subjected to specific interventions and individualized programming, which, although well-intentioned, risk perpetuating exclusion within the classroom (Gallego-Vega, 2011).

Although regular teaching staff implement changes, the pedagogical-neoliberal ideology continues to shape their work through an objectives-based approach, widely accepted by teachers and deeply ingrained in the regulations and practices of new teaching personnel. This approach inadvertently fosters passivity in students' learning processes, trapping them in a power/submission dynamic inherent to traditional teaching methods (Freire, 2012). Teachers often fail to recognize the classroom as a dynamic space that should encourage students to actively engage in their learning and connect emotionally. However, immersion in the prescribed curriculum often leads to treating diversity as a responsibility of specialists, rather than as an inclusive element in the broader educational context.

Evaluation within and for the Competency-Based Paradigm in the CARM Context

It is evident that an educational culture has been consolidated in the Region of Murcia (CARM), firmly situated within a broader neoliberal evaluation framework. This is

clearly reflected in the structuring of the teaching-learning and assessment-grading process, particularly through the aNota program. In this system, evaluation becomes central to the pedagogical approach, as seen in the final two phases of the Programming block—Phase III (Sequencing) and Phase IV (Instruments)—as well as in the other blocks: Grading, Grading Summary, and Reports (see Figure 1). Within the neoliberal-market-driven perspective, evaluation “constitutes or tends to create by itself an independent account of education” (Gimeno-Sacristán, 2013, p. 117), aiming to define the quality of competency-based teaching based on grades assigned after assessing the learning standards. This results in a working dynamic that fosters an assessment culture focused on outcomes (Santos-Guerra, 2003), reinforced by the aNota design, which dictates both what and how to assess.

However, in the educational centers of the Region of Murcia (CARM), the implementation of learning standards has raised significant concerns due to the complexities involved in assessing through this new process. This approach requires an almost exhaustive list of observable behaviours designed to simplify evaluation via multiple micro-objectives—learning standards. The underlying assumption is that assessing each micro-objective will lead to the desired behaviour, as defined by the main objective (Gimeno-Sacristán, 1997). This situation becomes problematic when evaluation is positioned as the central axis of the educational project. It becomes difficult to engage with a project primarily structured around evaluation, which marginalizes the importance of knowledge quality. Teachers are forced to spend more time considering how to evaluate and grade each standard than reflecting on the purpose of assessing each one.

“(...) it has been a change that requires significantly more effort to assign grades—much more than before—and demands much deeper reflection for each decision compared to the previous system (...)” (Emma, tutor)

This new dynamic limit space for critical reflection on evaluation. With aNota functioning as a tool to streamline the grading of all standards, it reinforces a technocratic and homogenizing system focused more on managing grading criteria than on pedagogical depth. Furthermore, this approach fosters a sense of security among teachers (Santos-Guerra, 2003), as organizing programs around learning standards allows all classroom content to be evaluated and justified in terms of accountability to the educational community.

“(...) When I give exams, I indicate under each student’s name which standard is being assessed. If a standard is ‘serialized from 1 to 1000’, I assign a corresponding number to align it with the evaluation test. I make it clear which standard is being evaluated so that, if a parent comes or an inspection occurs, I can present the test, which is based on my teaching plan, the specific task designed for that standard, and its assigned weight (...)” (Fernando, principal).

A culture of safety (Santos-Guerra, 2003) extends beyond merely justifying classroom evaluation results. The grading system, aligned with the correlation between learning standards, evaluation criteria, and key competencies, mirrors the structure of national competency assessments. This alignment guarantees that results, regardless of their

nature, can be substantiated through the applied grading strategies. To this end, educators follow the guidelines provided by aNota and use its range of evaluation instruments, including written tests, behavioural observations (individual or group), classwork, oral presentations, and participation. Although categorized as qualitative tools, these instruments ultimately target a specific subset of learning standards.

It is at this point that the magnitude of the problem becomes evident. When ACNEAE students are assessed against prescribed evaluation standards, many fail to meet these benchmarks due to their specific learning difficulties. These difficulties have no place within a legislative framework shaped by a neoliberal grading model, designed to classify and segregate students, reinforcing sociocultural homogeneity. This ideal, rooted in the LOMCE's interpretation of equity—granting each student what they 'deserve' based on their grade (Fernández-Sierra, 2011)—leads to negative evaluations for ACNEAE students who do not meet grade-level standards, regardless of their effort, progress, or actual learning.

“(...) We frequently encounter students who put in tremendous effort and work diligently yet have a lower level of competence. When it comes time for evaluation, we are forced to assign them grades based solely on the standards they have not met. This creates a significant gap in the system, which also impacts students in compensatory education. These learners, despite their continued effort and notable progress, end up with negative marks on their report cards sent to their families (...)” (Sonia, PT).

This unfair reality is primarily challenged by Therapeutic Pedagogy specialists, who denounce a significant legal vacuum in the evaluation process for ACNEAE students. For learners with language difficulties, such as SLI, dyslexia, or dyslalia, the law offers few effective alternatives. While adaptations to standards or methodological adjustments are theoretically possible, the rigidity of the current evaluation and grading system often renders them impractical. As a result, these students are officially assigned negative grades, despite their efforts and progress. In response, schools resort to drafting individualized reports and holding meetings with families to contextualize the students' development and justify the grades reflected on their report cards.

Educational inclusion and individualized attention—core principles of the constructivist competence paradigm—are sidelined due to the pressing need for teachers to adhere to regulatory mandates. These regulations, which rigidly define and constrain the pedagogical practices in CARM schools, impose a normative framework that diminishes both professional judgment and pedagogical innovation. Under the weight of legal authoritarianism, teachers' knowledge and expertise are overshadowed, shaped instead by a deficit-based discourse that sustains this educational culture (García-Pastor, 2003).

DISCUSSION AND CONCLUSIONS

From the naturalistic-interpretative paradigm framing our research, we consider it relevant to highlight key findings that emphasize the transferability of our study on the competence-based project within the Spanish education system, as exemplified by the

Region of Murcia (CARM). This pioneering study in the educational field critically shows how competency-based teaching is being implemented according to international political guidelines and the socialization processes teachers undergo in educational institutions.

The accelerated behaviorist-economic competency project implemented by the LOMCE (2013), grounded in Total Quality Management (TQM), represents the culmination of key competencies within the Spanish education system. It establishes the guidelines that have shaped competency-based education for the past decade, simplifying key competencies into a narrow set of measurable items—TRI—dictated by the neoliberal pedagogical framework, reflecting behaviorist learning theories. Rationalist evaluation models, such as those employed by the OECD, transform key competencies into a pedagogical efficiency approach that emphasizes individualistic knowledge application within a cognitive-equality framework (Angulo-Rasco, 2016). This redistributive yet discriminatory model consolidates a meritocratic system under the guise of equality, ultimately distorting the compensation of individual needs and limiting the right to a democratic, high-quality, and inclusive education.

This approach to equality leads to a homogenizing and standardizing curricular design that overlooks didactic strategies for social justice, favoring segregation in access to knowledge. This form of discrimination arises from the epistemic neoliberal foundations that treat diversity as a process of homogenization. Teaching strategies, within a functionalist perspective, follow a technical model. A clear example is seen in the CARM, where its alignment with the competence project of the LOMCE fosters socio-cultural homogenization through the aNota program. Embraced by teachers as a tool for qualification, it is driven by the implicit culture of security (Santos-Guerra, 2003), justifying poor results in external evaluations assessing key competencies. The behaviorist-economists competency framework recalls the evaluation culture of quantitative-rationalist models, which impairs the opportunity for a democratic evaluation (MacDonald, 1989), allowing for deeper reflection on the ‘why’ and ‘for what purpose’ in the teaching-learning process, beyond mere numerical results.

Following the rise of the competency-based project under the LOMCE in the Spanish School System, a new competency-oriented approach emerges with the LOMLOE for Primary Education. This is outlined in Annex I, detailing the Student’s Output Profile at the end of basic education, according to Royal Decree 157/2022. This ‘novelty’ assigns each key competence the term ‘operative descriptors’, specifying the ‘skills’ and/or ‘goals’ expected of students. Inspired by European regulations, this innovation reflects international neoliberal demands on key competencies, emphasizing the inclusion of STEAM as a cornerstone of the new framework. However, given the trajectory of our school system with key competencies, one must ask: What is truly new? Are these merely postmodern terminologies to captivate the educational community, or do they signal a genuine shift towards a new competency-constructivist approach?

In losing, we propose extending this research through a multi-case study. This approach would allow for a deeper exploration of the socialization process that teachers experience regarding the new competency-based project at the national level, including

all autonomous communities in Spain. Additionally, it would provide a more comprehensive understanding of the ideological and pedagogical idiosyncrasies of competency-based teaching, laying the foundation for the design of professional development programs to equip educators with the tools needed to implement this model effectively.

Such training should emerge from critical pedagogical-epistemic reflection and move beyond a basic in-service training course. Instead, it should be conceived as both macro-structural and micro-institutional continuous training, encompassing everything from the educational policies that shape curricular designs to the teaching-learning processes within schools.

That is, it is essential to begin by understanding what competency-based teaching means from a constructivist perspective, and what kind of knowledge this paradigm promotes, in order to break the link between competency-based teaching and a technocratic-economic curricular design. Only then can we move toward a flexible curriculum where knowledge is validated equally to make knowledge more accessible to all students.

In such a curriculum, objectives are not the central axis of the teaching-learning process; rather, the focus lies on the content to be learned. It is through this globalized and interdisciplinary knowledge that critical thinking is fostered, enabling a form of competency-based teaching that encompasses knowing, knowing how to do, and knowing how to be (Pérez-Gómez, 2007). An inclusive curriculum design necessarily entails the involvement and collaboration of all educators to implement it in the classroom. Here, macro-structural continuous training merges with individualized micro-institutional training, allowing each educational institution, based on a differentiated understanding of competency-based teaching from a constructivist paradigm, to design its own competency-based curricular projects. These should provide general methodological guidelines supporting this type of learning, establish working groups to develop necessary materials, and consolidate intra- and inter-school networks as well as democratic pedagogical leadership to align efforts and foster high-quality competency-based education. Such a working dynamic must be guided by experts in the field of competency-based teaching to ensure the shift away from a technocratic-economic design.

REFERENCES

Ainscow, M. (2012). Haciendo que las escuelas sean más inclusivas: lecciones a partir del análisis de la investigación internacional. *Revista de Educación Inclusiva*, 5(1), 39-49.

Ángulo-Rasco, J.F. (2016). Justicia Social en la Escuela Pública: entre la redistribución y el reconocimiento. En Ramírez-Hernández, I.E. (ed.), *Voces de la inclusión: interacciones y críticas a la idea de "inclusión" escolar* (pp.23-45). Praxis Editorial.

Carbonell, J. (2019). *Pedagogías del siglo XXI. Alternativas para la innovación educativa*. Octaedro.

Coople ,C., Kane, M., Mtheson, N.,Meltzer, A., Packer, A. and White, T. (1993). Teaching the Sans Competencies. - The Secretary's Commission on Achieving Necessary Skills-.

Decreto 198/2014, de 5 de septiembre, por el que se establece el currículo de la Educación Primaria en la Comunidad Autónoma de la Región de Murcia. *Boletín Oficial Región de Murcia*, 206, de 6 de septiembre de 2014.

De la Orden Hoz, A. (2011). El problema de las competencias en la educación general. *Bordón. Revista de Pedagogía*, 63(1), 47-61.

Delors, J. (Pte.) (1996). *La educación encierra un tesoro. Informe a la Unesco de la Comisión internacional sobre la educación para el siglo XXI*. Santillana/Unesco.

Duran, D. y Giné, C. (2011). La formación del profesorado para la educación inclusiva: Un proceso de desarrollo profesional y de mejora de los centros para atender la diversidad. Un proceso de desarrollo profesional y de mejora de los centros para atender la diversidad. *Revista Latinoamericana de Educación Inclusiva*, 5 (2),1-215.

Egido-Gálvez, I. (2011). Las competencias clave como elemento central del currículo de la enseñanza obligatoria: un repaso a las experiencias europeas. *Revista Española de Educación Comparada*, 17, 239-262.

Elliot, J. (1992). ¿Son los indicadores de rendimiento indicadores de la calidad educativa? *Cuadernos de pedagogía*, ISNN, 0210-0630, (206), 56-60.

Elliot, J. (2010). La investigación-acción en educación. Morata.

English, L.D. (2016). STEAM education K-12: perspectives on integration. *English International Journal of STEAM Education*, 3(3), 1-8.

Fernández-Sierra, J. (2011). Construir las perspectivas curriculares para la sociedad del conocimiento. *Formar para la economía del conocimiento vs educar para la sociedad del conocimiento* (pp.67-72). Ediciones Aljibe.

Fernández-Sierra, J. (2011). *Formar para la economía del conocimiento vs educar para la sociedad del conocimiento*. Ediciones Aljibe.

Fernández-Sierra, J. y Fernández-Larragueta, S. (2013). Investigar en las transiciones académico-culturales: Estudios de caso, multicaso. En Fernández-Sierra, J. (Ed.), *Transitar la cultura* (pp.15-30). Ediciones Albije.

Freinet, C. (1979). *La educación moral y cívica*. Laia.

Freire, P. (2012). *Pedagogía del oprimido*. Siglo XXI.

Gallego-Vega, C. (2011). El apoyo inclusivo desde la perspectiva comunitaria. *Revista interuniversitaria de formación del Profesorado*, 70(20,1), 93-109.

García-Diéguez, M. y Ladenheim, R.L. (2020). Las actividades profesionales confiables: una herramienta para hacer operativo el concepto de competencia. *Revista Methodo*, 5(1), 30-34.

García-Fuentes, O.; Raposo-Rivas, M.; Martínez-Figueira, M. (2023). El enfoque educativo STEAM: una revisión de la literatura. *Revista Complutense de Educación*, 34(1), 191-202.

García-Pastor, C. (2013). Los obstáculos para desarrollar una perspectiva curricular sensible a las diferencias y las posibilidades de cambio en la práctica. *Profesorado. Revista de Curriculm y Formación de Profesores*, 16(3), 213-229

Gimeno-Sacristán, J. (1997). *La Pedagogía por objetivos: obsesión por la eficiencia*. Morata.

Gimeno-Sacristán, J. (2013). La modernidad antimoderna. La evaluación como discurso y como práctica. *En busca del sentido de la educación*, (pp.116-144). Morata.

Goetz, J.P. y LeCompte, M.D. (2010). *Etnografía y diseño cualitativo en investigación educativa*. Morata.

Grundy, S. (1998). Producto o praxis del currículum. Morata.

Guba, E.G. (2008). Criterios de credibilidad en la investigación naturalista. En Pérez-Gómez, A. y Gimeno-Sacristán, J. (Ed.), *La enseñanza: su teoría y su práctica* (pp.148-165). Akal.

Habermas, J. (2005). Tres modelos de democracia. Sobre el concepto de una política deliberativa. *Polis, Revista de la Universidad Bolivariana*, 4(10).

Hargreaves, A. (2005). *Profesorado, cultura y postmodernidad. Cambian los tiempos, cambia el profesorado*. Morata

La Definición y Selección de Competencias Clave. Resumen ejecutivo (2003). <https://www.deseco.ch/bfs/deseco/en/index/03/02.parsys.78532.downloadList.94248.DownloadFile.tmp/2005.dsceexecutesummary.sp.pdf>

Looney, J. y Michel, A. (2014). *Keyconet's conclusions and recommendations for strengthening key competence development in policy and practice*. European Schoolnet.

López-Gómez, E. (2016). Entorno al concepto de competencia: un análisis de fuentes. *Profesorado. Revista de Curriculm y Formación de Profesores*, 20(1), 311-322.

MacDonald, B. (1989). La evaluación y el control de la educación. En Gimeno-Sacristán, J. *La enseñanza: su teoría y su práctica*, (467-478) Akal.

Martín-Romera, A., Higueras-Rodríguez, I., & Martínez-Valdivia, E. (2023). Teachers, education administrators, education experts and students' opinions on teacher education programs for secondary school teachers. *International Journal of Instruction*, 16(4), 503-520. <https://doi.org/10.29333/iji.2023.16429a>

Nevado-Luna, J. M., Del Valle Díaz, S., Sánchez Sánchez, F., & Rodríguez-Gómez, I. (2025). Key competences that allow excellence in teaching practice. *International Journal of Instruction*, 18(3), 1-18. <https://doi.org/10.29333/iji.2025.1831a>

Olle-ten. C. (2017). A primer on entrustable profesional activities. *Revista de la*

Fundación Educación Médica, 20(3), 95-102.

Ortiz-Revilla, J., Greca, I.M., y Adúriz-Bravo, A. (2021). Conceptualización de las competencias: revisión sistemática de su investigación en educación primaria. *Profesorado*, 25(1), 224-250.

Pérez-Gómez, A.I. (2007). Consejería de Educación de Cantabria. *La naturaleza de las competencias básicas y sus aplicaciones pedagógicas*. Cuadernos de Educación 1.

Pérez-Gómez, A.I. (2012). *Educarse en la era digital*. Morata.

Pérez-Gómez, A.I. (2018). *Pedagogías para tiempos de perplejidad: de la información a la sabiduría*. HomoSapiens.

Perignat, E. y Katz-Buonincontro (2019). STEAM in practice and research: An integrative literature review. *Thinking Skills and Creativity*, 31, 31-43.

Ramírez-García, A. (2016). Evaluación de las competencias básicas en educación primaria: Una mirada desde la óptica docente. *Profesorado. Revista de currículum y formación del profesorado*, 20(1), 243-264.

Recomendación del Parlamento Europeo y del Consejo de 18 de diciembre de 2006 sobre las competencias clave para el aprendizaje permanente. *Diario Oficial de la Unión Europea*, de 30 de diciembre de 2006. <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:394:0010:0018:ES:PDF>

Santos-Guerra, M.A. (2003). *Una flecha en la diana: la evaluación como aprendizaje*. Narcea.

Stake, R.E. (2010). La naturaleza de la investigación cualitativa. *Investigación con estudios de casos* (pp.41-50). Morata.

Stenhouse, L. (2010). *Investigación y desarrollo del currículum*. Morata

Tan Hoi, H. (2021). Applying STEAM Teaching Method to Primary Schools to Improve the Quality of Teaching and Learning for Children. *International Journal of Early Childhood Special Education*, 13(2), 1051-1055.

Taylor, S.J. y Bogdan, R. (2010). *Introducción a los métodos cualitativos de investigación*. Paidós.

Torres-Santomé, J. (2017). *Políticas educativas y construcción de personalidades neoliberales y neocolonialistas*. Morata.

Vasquez, J., Sneider, C. y Comer, M. (2013). *STEAM Lesson Essentials, Grades 3-8: Integrating Science, Technology, Engineering and Mathematics*. Heinemann.