Analysis of content and underlying theories in Spanish reference texts on General Didactics

Análisis de contenido y teorías subyacentes en los textos españoles de referencia sobre Didáctica General

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Abstract:

The results of the 2019 Pisa Reports confirm that the Spanish education system continues to stagnate after compulsory education has been completed. This situation calls for self-criticism on the part of all actors involved. One of the groups concerned are the university professors and lecturers who provide training for prospective teachers. Among them are those who teach General Didactics. They provide basic and multi-purpose training on teaching methods for prospective teachers. For this purpose, they usually consider traditional and recent textbooks and other reference texts on teaching theory and practice, which help to define the discipline. The aim of the study is to find out whether these works train and equip prospective teachers with teaching competences and to verify their educational and professional potential with regard to the teaching theory they convey. In order to fulfil this aim, a descriptive documentary study of 35 reference works on General Didactics was carried out, including both textbooks and texts used as sources of didactic knowledge. The content of the structure and composition of these texts was analysed. The results show a tendency to prioritise theoretical aspects over competences and to order chapters based on a technical and administrative

Revision accepted: 2021-05-10.
This is the English version of an article originally printed in Spanish in issue 280 of the **revista española de pedagogía**. For this reason, the abbreviation EV has been added to the page numbers. Please, cite this article as follows: Moral Santaella, C., & De la Herrán Gascón, A. (2021). Análisis de contenido y teorías subyacentes en los textos españoles de referencia sobre Didáctica General | *Analysis of content and underlying theories in Spanish reference texts on General Didactics. Revista Española de Pedagogía, 79* (280), 437-455. https://doi.org/10.22550/REP79-3-2021-01
https://revistadepedagogia.org/ ISSN: 0034-9461 (Print), 2174-0909 (Online)

tradition, rather than a conceptual and semantic approach focused on designing a meaningful learning experience. As an applied summary, recommendations are provided for the development of textbooks on General Didactics, aimed at initial teacher training, from a more competence-based and less academic approach.

Keywords: General Didactics, reference work, teacher training, competence, teaching profession.

Resumen:

Los resultados de los Informes Pisa 2019 confirman que el sistema educativo español sigue estancado al finalizar la enseñanza obligatoria. Esta situación requiere una autocrítica de todos los agentes implicados. Uno de los colectivos concernidos son los profesores universitarios que preparan a los que serán futuros docentes. Entre ellos, se encuentran los que enseñan Didáctica General, que facilitan una formación didáctica básica y polivalente a los futuros docentes. Para ello, suelen tener en cuenta manuales clásicos y recientes y otros textos de referencia sobre teoría y práctica de la enseñanza, que contribuyen a definir la disciplina. El objetivo del estudio es conocer si estas obras preparan a los futuros profesores en competencias docentes y verificar su potencial didáctico y profesionalizador de la teoría de la enseñanza que transmiten. Para dar respuesta a este objetivo, se optó por un estudio documental de carácter descriptivo, de 35 obras de referencia de Didáctica General, entre las que se incluyeron tanto manuales como textos utilizados como fuentes de conocimiento didáctico. Sobre esos textos se ha realizado un análisis de contenido de su estructura y composición. Los resultados muestran una tendencia a valorar los aspectos teóricos sobre los competenciales y a ordenar sus capítulos desde una tradición técnico-administrativa, en vez de hacerlo desde una aproximación conceptual y semántica enfocada al diseño de una experiencia de aprendizaje significativa. Como síntesis aplicada, se aportan recomendaciones para elaborar manuales de Didáctica General, orientados a la formación inicial del profesorado, desde un enfoque más competencial y menos academicista.

Descriptores: Didáctica General, obra de referencia, formación de profesores, competencia, profesión docente.

1. Introduction

Self-criticism is necessary in education and research. It can provide a basis for rectifications and improve processes and results. When it comes to those who train prospective teachers, such action is imperative, even if not done very often. This paper is, thus, in relation to this training area.

If teacher training and quality education are related (State School Council, 2015), the poor results of the 2020 PISA reports, the stagnant mediocrity of

the Spanish education system and those who train prospective teachers could be too. University professors and lecturers who are entrusted with the training of prospective teachers should reflect as observers and actors concerned. In a text on pedagogical self-criticism, Bolívar and Pérez (2019) addressed "education policies on teachers", considering credits, regulations, legislative reforms, procedures, selection, professional competences, ethics, etc. In a field as complex as education and teaching, the current initial teacher training model in Spain should also be analysed.

The syllabi are structured around theoretical subjects, where the basic knowledge of the profession is acquired, and one or more periods of teacher placement, where part of this knowledge is observed and confirmed. The assumption is that in this way — in one year, secondary school teachers — will acquire the necessary skills and competences to bring good teaching practice alive. Recent studies question this model, pointing to the need for change regarding training. The objection is that there is little connection between the theory taught in the faculty and the actual practice of teaching. The professional potential of these syllabi in terms of teaching competences is questioned, since many prospective teachers feel that the regular subjects do not offer them, despite what is promised in their teaching guides. Furthermore, they believe that teaching competences are learned during the Practicum, even though a gap is detected between the Practicum and the other subjects, along with a weakness in the training instruments that connect them. This means that they are lacking in pedagogical consistency which could be improved, if we are concerned with developing competences (Egido & López, 2016; Gairín et al., 2019).

Some variables could be identified as possible causes of this problem. There is one radical or causal variable that stands out: the type of knowledge used by trainers to prepare prospective teachers. Shulman (2005) pointed out that one type of basic teacher knowledge is the so-called "general pedagogical knowledge". This field would fit in with the corpus of General or Multipurpose Didactics. It refers to the theory and practice of teaching for training, providing, among other things, competences for the design and development of meaningful and educational learning experiences.

The reference works on General Didactics gather and summarise this knowledge for teacher training. However, are they professionally oriented and aimed at providing training in basic/key teaching competences and practices that are currently in demand, or are they approached from an academic point of view out of touch with practice? And one other essential issue: What teaching theory are they based upon? The answers to these questions form the basis for these inquiries, complementary to the work of Heredia (2015), although this researcher studies the internal organisation of textbooks comparable to the field of General Didactics from a historical and epistemological

perspective, and, in our case, they are analysed by questioning both the teaching theory that is used as a model and the academic or professional approach that underpins them.

2. Foundations for a theory of teaching

Teachers, like other professionals, need basic knowledge that can be applied. General Didactics should, on the one hand, provide the essential knowledge and competences to carry out educational teaching and, on the other hand, allow them to build, from their experience, a professional rationale and their own well-founded body of knowledge (*episteme*) in order to design and develop a curriculum.

Curriculum design, centred on planning educational experiences, requires careful thought on the curriculum components and their relationship to learning and training. Thought regarding such is not easy, given that, in an educational and relevant sense, at least the elements defined by Tyler (1949) — objectives, activity and control-evaluation —, the "commonplaces" of Schwab (1970) — teacher, learners, subject matter and social matrix — and the key competences are to be related as the backbone of education (Council of the European Union, 2018). Thus, innovative designs are possible, combining or prioritising some elements over others, to achieve meaningful, deep and relevant learning for students (Darling-Hammond & Oakes, 2019).

In order to be able to plan, it is necessary to understand the meaning of "learning", both as a concept associated with prior thought given to the nature and form of human knowledge, and on its creation and cognitive organisation. Neuroscience and cognitive psychology provide a basis for training, from a General Didactics approach, regarding human knowledge originating from an information processing system, not mechanical or objective, but subjective and reconstructive and based on the experience of each individual (Sousa, 2017; Weinstein & Sumeracki, 2019). Knowledge originates in the learning experience itself, in a process of transforming experience by means of a cycle of action/thought-experience/abstraction and becoming organised in the mind through schemas and conceptual structures that establish meaningful conceptual relationships. This conceptual knowledge enables what has been learned to be retained, recalled and transferred to problem solving. Retention and recall-identification of information is considered an essential step for the transfer of learning; the downside is when they become the ultimate goals of teaching, rather than a means for transferring what is learned to functional situations and contexts.

The search for meaningful and applicable learning, as opposed to retentive learning, has not prevailed in the history of teaching. In many contexts, Freire's observation, which saw school learning as a routine process of storing information, in which domestication and memorisation without meaning prevailed, is

still valid. Priority is still given to representational learning, or the acquisition of labels, in order to replicate what is conveyed by the teacher, rather than to the acquisition of concepts that generate structures and conceptual frameworks for transfer, thus enabling the student to reason and get by independently.

This traditionalism led to the emergence of the experimentalist approaches fostered by Dewey (1902), which considered experimentation, activity and discovery to be the basis of formative learning. This approach gave rise to methodologies in which manipulation and activity predominated as ways of discovering and learning concepts. Nevertheless, it has been demonstrated that the student's experience alone does not guarantee the discovery of concepts and meaningful learning. Appropriate circumstances and consistent teaching are required. For Novak (2010), the theory of teaching by means of action and experimentation has overlooked the learning process and the structure on which it is based. For Walter and Soltis (2004), this is the cause of the clash between progressive and traditional curriculum theorists.

Progressive theorists are opposed to the practice of non-meaningful memorisation, and produce a wide variety of proposals. For example, alternative curricula built around the interest and needs of the student, activity, experience, task completion, manual work, etc. Some expect students to produce their own curriculum based on their own interests (Walter & Soltis, 2004). In this clash, the content to be taught has been discredited to the point of disappearing as an essential element in learning designs.

In the Spanish Didactics of the 1960s, content had a certain prominence: it was considered the key element of the learning process, since the conceptual structure was important. This approach was threatened by the movement in which content was relegated due to prioritising the task or activity. In fact, it became detached from the knowledge base that defined the teaching professional, disappearing from training programmes and reference works on General Didactics, becoming diluted in objectives and evaluation. Even when the question "why teach?" was asked, the answer was given in terms of educational objectives, not content (Rodríguez-Diéguez, 1980).

Today, what is important are skills, activity and learning experience. The competences proposed by the European Commission (2004) made quite an entrance in Spain (Bolívar, 2010) and were quickly integrated. In the competence-based teaching model, the subjects contribute to their development, they are conditioned by them, and the relevance, acquisition and use of knowledge are seen as traditional.

Faced with this dual discussion, what is the purpose of education? Broadly-speaking, to make citizens happy, put an end to injustice, inequality, contribute to social development, etc. More specifically, the development of the individual through learning (Walter & Soltis, 2004),

so that every student can think, feel and act autonomously and creatively (Novak, 2010). It is, therefore, a matter of going beyond rote learning, without falling victim to the inconsistencies of learning based on competence and experience. For planning purposes, the components of teaching (students, teacher, content, climate, objectives, activity, evaluation and competence) must be combined to achieve student education in thinking, feeling and acting (Novak, 2010), drawing on the findings of neuroscience and cognitive psychology (Sousa, 2017; Weinstein & Sumeracki, 2019).

The order and organisation of the teaching components may or may not be conducive to an educational approach to learning. One way could be as follows: first, every teacher must start by considering the student and the need to foster personalised learning and education that connects and matches their emotions, interests, motivations, styles, contexts, experiences, etc. Then, what the teaching or educational content deals with (disciplinary knowledge), reflecting on its selection and organisation, regarding the key questions that make it accessible and its transferability and usability (McTighe & Willis, 2019). Thirdly, we may ask about the meaning of their learning, specifying the objectives of the action, according to the content selected and the conceptual structure identified. For this purpose, solvent taxonomies of learning objectives may be used, such as that by Anderson and Krathwohl (2001), recently assessed by Sousa from the perspective of neuroscience (2017). It progresses from recall objectives to evaluation, design and creation objectives. Fourthly, the monitoring process for the design of objectives must be specified in order to assess progression in learning, providing the necessary feedback and formative evaluation required for personalised learning (Hattie & Clarke, 2019). Fifthly, once the outline of the design has taken shape, we can then identify the system of relationships created in class and the teaching methodology for the action and recreation of students' thinking, feeling and acting (Ritchart & Church, 2020), which will be enriched by the diversity of key competences developed from the methodological proposals, tasks and classroom activities (Bolívar, 2010).

The above structure is flexible, variable and open to innovation. However, including content as the basis of the teaching planning process optimises the coordination between General and Specific Didactics. It involves transcending the exacerbated "pedagogism" of the 1980s, which was more interested in assessing how teaching was carried out than what was actually taught, to whom and when it was taught, and which was widely rejected by secondary school teachers (Bolívar, 2005). From the perspective of active and consistent teaching, it involves making sense of the student's formative learning experience, placing what the teaching and learning addresses at the centre of formative attention.

In short, current recommendations and imperatives for teacher training em-

phasise a competence-based teaching model. The knowledge regarding General Didactics that is transferred to prospective teachers should fit in with such competences. Otherwise, the knowledge transferred as a basis for action will be useless and unlikely to be put into practice or professionally oriented. In light of this doubt, the general aim of this study is to find out whether the reference works for General Didactics equip prospective teachers with teaching competences and to verify to what extent they can, in this sense, be considered to have professional potential. The specific objectives are threefold: (1) To verify the teaching theory that underpins them, checking the content they address; (2) To ascertain the structure organising the content of the texts studied; and, (3) to deduce whether the content transferred in these works maintains an internal and coordinated order.

3. Methodology

In order to meet the objectives, the study is based on documentary research, which explores the foundations of the reference texts on General Didactics, providing answers to the typical questions in descriptive research: "what, how and who of the phenomenon being studied" (Hall, 2020, p. 35). Thirty-five texts were selected according to three criteria and reviewed. Such criteria are: published from the 1980s onwards, when General Didactics began to be considered as scientific knowledge associated with curriculum studies (Bolívar, 2008); were or still are a reference in the production of Teaching Guides for the subject of General Didactics in numerous Spanish universities, or cover the specific content of General Didactics.

They will be described using the following categories of analysis:

- Type of authorship: individual or collaborative.
- Subject matter dealt with:
  a) Didactic epistemology/curriculum: Didactics as a scientific discipline, conceptualisation of Didactics/curriculum, curriculum theories, types, models, curriculum paradigms, curriculum theory-practice and curriculum reform, curriculum and school, research approaches in didactics.
  b) Curriculum design: Types of learning design, curriculum components, curriculum realisation.
  c) Teachers: Professional capital, roles, responsibilities, authenticity, identity, autonomy.
  d) Learners: Personalisation, motivation, learning styles, intelligences, autonomy, identity, metacognition, context.
  e) Content: Selection, organisation, sequencing, disciplinary and global approaches
  f) Objectives: Types and levels of generalisation, taxonomies of learning objectives, design of objectives.

g) Competences: Types of competences, function of competences, organisation of learning design around competences.

h) Mix of curriculum Elements — chapter where curriculum components, objectives, content, competences, methodology, resources and evaluation are combined.

i) Teaching methodology: How to teach, types of methodologies (direct, collaborative, inquiry-based, etc.), teaching-learning models.

j) Teaching resources: Types of resources with and without ICT, usefulness and application of teaching aids, didactics and media.

k) Pedagogical evaluation: Types of evaluation, procedures, instruments, evaluation of teaching, evaluation of learning, evaluation of the teaching-learning context, implications of evaluation.

l) Techniques: Techniques and strategies to facilitate learning.

m) Classroom climate: Classroom climate management, interaction, communication, teacher authority, conflict resolution, relationship system, management and organisation of the learning context.

n) Teacher development and educational innovation: School improvement and change processes, teacher professional development.

o) Design examples: Case studies and examples of learning designs.

- Number of chapters relating to each subject matter.

- Order of chapters.

The analysis does not go into detail regarding the content of each work, as the information given is considered sufficient to fulfil the objectives. Some were not designed as textbooks, but became reference texts generally used as sources of basic and applied pedagogical knowledge. This is the case of Gimeno (1981), Gimeno & Pérez Gómez (1992), Escudero (1999) and Bolívar (2008). Although some are broader and others more specific, they have provided the basis for pedagogical knowledge. Therefore, they can be considered reference works for teaching General Didactics to prospective teachers. Regardless of their greater or lesser use, they have shaped Didactics and continue to set the trend in Spain. A total of 35 texts and 435 chapters were analysed.

The bibliographical data of the texts studied are not included in the List of References, as they are considered to be data pertaining to the study. They can be found in Table 1:

TABLE 1. Reference texts on General Didactics reviewed.

No.	Year	Authors/ Coordinators	Title	Place of publication/Publisher
1	1980	Rodríguez-Diéguez, J. L.	*Didáctica General [General Didactics]*	Madrid: Cincel
2	1981	Gimeno, J.	*Teoría de la enseñanza y desarrollo del currículo [Teaching theory and curriculum development]*	Madrid: Anaya
3	1983	Blázquez, F. & Sáenz, Ó.	*Didáctica General [General Didactics]*	Madrid: Anaya
4	1987 1995	Zabalza, M. Á.	*Diseño y desarrollo curricular [Curriculum design and development]*	Madrid: Narcea
5	1988	Gimeno, J.	*El currículo: una reflexión sobre la práctica [The curriculum: A reflection on practice]*	Madrid: Morata
6	1989	Gimeno, J. & Pérez Gómez, Á.	*La enseñanza. Su teoría y su práctica [Teaching. Its theory and practice]*	Madrid: Akal
7	1992	Gimeno, J. & Pérez Gómez, Á.	*Comprender y transformar la enseñanza [Understanding and transforming teaching]*	Madrid: Morata
8	1993	Torre, S. de la	*Didáctica y currículo [Didactics and curriculum]*	Madrid: Dykinson
9	1994	Angulo, J. F. & Blanco, N.	*Teoría y desarrollo del currículo [Curriculum theory and development]*	Málaga: Aljibe
10	1994	Sáenz, Ó.	*Didáctica General. Un enfoque curricular [General Didactics. A curricular approach]*	Alcoy: Marfil
11	1997	Díaz-Barriga, Á.	*Didáctica y currículum [Didactics and curriculum]*	Barcelona: Paidós
12	1997	Rodríguez-Rojo, M.	*Hacia una Didáctica crítica [Towards critical Didactics]*	Madrid: La Muralla
13	1998	Escribano, A.	*Aprender a enseñar. Fundamentos de Didáctica General [Learning to teach. Foundations of General Didactics]*	Cuenca: UCLM
14	1999	Escudero, J. M.	*Diseño, desarrollo e innovación del currículum [Curriculum design, development and innovation]*	Madrid: Síntesis
15	1999	Martín-Molero, F.	*La Didáctica en el tercer milenio [Didactics in the third millennium]*	Madrid: Síntesis
16	2000	Marhuenda, F.	*Didáctica General [General Didactics]*	Madrid: De la Torre
17	2004	Rodríguez-Rojo, M.	*Didáctica General: qué y cómo enseñar en la sociedad del conocimiento [General Didactics. What and how to teach in the knowledge society]*	Madrid: Biblioteca Nueva
18	2004	Sevillano, M. L.	*La Didáctica del siglo XXI [Didactics in the 21st century]*	Madrid: Mc-Graw-Hill
19	2004	Heredia-Manrique, A.	*Curso de Didáctica General [Course on General Didactics]*	Zaragoza: Prensa Universitaria
20	2005	Tejada, J.	*Didáctica-Currículum: diseño, desarrollo y evaluación curricular [Didactics-Curriculum: Curriculum design, development and evaluation]*	Barcelona: Davinci
21	2008	de la Herrán, A. & Paredes, J.	*Didáctica General. La práctica de la enseñanza en educación infantil, primaria y secundaria [General Didactics. Teaching practice in early years, primary and secondary education]*	Madrid: Mc-Graw-Hill

22	2008	Bolívar, A.	*Didáctica y currículum: de la modernidad a la postmodernidad [Didactics and curriculum: From modernity to postmodernity]*	Málaga: Aljibe
23	2008	Sánchez-Huete, J. C.	*Compendio de Didáctica General [A compendium of General Didactics]*	Madrid: CCS
24	2009	Medina, A. & Mata, F. S.	*Didáctica General [General Didactics]*	Madrid: Printice-Hall
25	2010	Moral, C.	*Didáctica. Teoría y práctica de la enseñanza [Didactics. Theory and practice of teaching]*	Madrid: Pirámide
26	2010	Bolívar, A.	*Competencias básicas y currículo [Key competences and curriculum]*	Madrid: Síntesis
27	2011	Cantón, I. & Pino, M.	*Diseño y desarrollo del currículum [Curriculum design and development]*	Madrid: Alianza
28	2011	Navarro, R.	*Didáctica y currículum para el desarrollo profesional docente [Didactics and curriculum for teacher professional development]*	Madrid: Dykinson
29	2011	Lorenzo Delgado, M.	*Didáctica para educación infantil, primaria y secundaria [Didactics for early years, primary and secondary education*	Madrid: Universitas
30	2014	Gómez, I. & García, F. J.	*Manual de Didáctica [Manual on Didactics]*	Madrid: Pirámide
31	2015	Domingo, J. & Pérez, M.	*Aprendiendo a enseñar. Manual práctico en Didáctica [Learning to teach. A practical manual on Didactics]*	Madrid: Pirámide
32	2015	Medina, A. & Domínguez, M. C.	*Didáctica. Formación inicial para profesionales de la educación [Didactics. Initial training for education professionals]*	Madrid: UNED
33	2019	Moral, C.	*Competencias para el diseño y desarrollo de experiencias de aprendizaje en la formación del profesorado [Competences for the design and development of learning experiences in teacher training]*	Madrid: Síntesis
34	2019	Paredes, J. Esteban, R. M. & Rodrigo, M. P.	*Didáctica inclusiva y transformadora [Inclusive and transformative didactics]*	Madrid: Síntesis
35	2020	Medina, A. Herrán, A. de la & Domínguez, M. C.	*Hacia una Didáctica humanista [Towards humanist Didactics]*	Madrid: UNED–Red Iberoamericana de Pedagogía (REDIPE)

Source: Own elaboration.

4. Results and discussion

The results are collated in Tables 2 and 3, which show the type of authorship and the average and percentage of occurrence of the categories analysed. Graph 1 visually summarises the results obtained in relation to the number of chapters on each subject matter and their positioning in the texts.

TABLE 2. Type of authorship.

Authorship	Frequency	Percentage
Individual	18	51.4%
Collaborative	17	48.6%

Source: Own elaboration.

In relation to the first category considered, and to answer the first research question, the analysis shows that 17 texts (48.6%) are collaborative works and 18 (51.4%) are produced individually. Those that are collaborative include a greater diversity of approaches, vocabulary, concepts and points of view, but at the same time they can be contradictory and hinder conceptual learning. Some of them present an accumulation of chapters with no common thread or sense applied. Those coordinated by Cantón and Pino (2011), Gómez and García (2014) and Domingo and Pérez (2015) are among the few that include examples of learning designs. In the works of Gómez and García (2014) and Moral (2019), the chapters on theory are closely related to the final examples of learning designs. In some, both collaborative and individual, technical errors were detected.

TABLE 3. Average and percentage of indicators analysed.

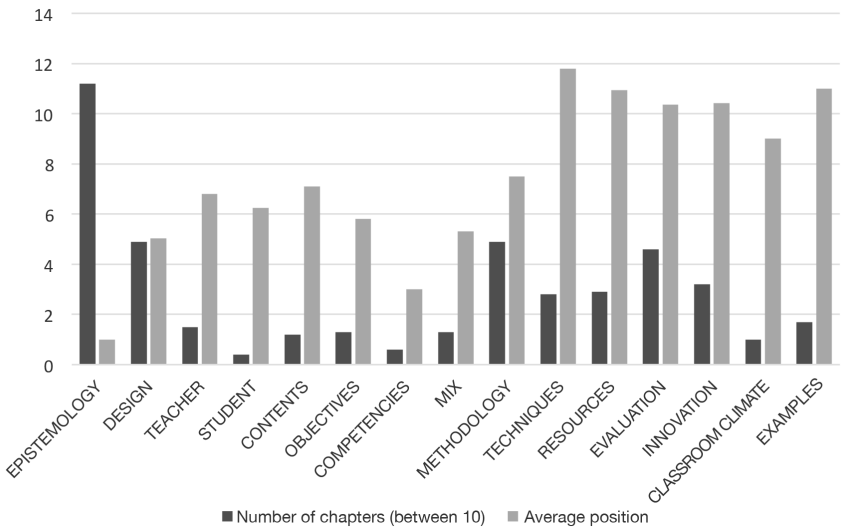
Category of analysis	Mean	Percentage
No. of chapters per book	12.8	
Epistemology	3.2	25.7%
Design	1.4	11.3%
Teachers	0.4	3.4%
Learners	0.1	0.9%
Content	0.3	2.7%
Objectives	0.4	3%
Competences	0.2	1.4%
Mix	0.4	3.4%
Methods	1.4	11.3%
Techniques	0.8	6.4%
Teaching resources	0.8	6.4%
Evaluation	1.3	10.6%
Innovation-teaching development	0.9	7.3%
Social climate of the classroom	0.2	1.4%
Examples/experiences	0.5	4.8%

Source: Own elaboration.

The subject matter with the largest number of chapters is the epistemology of Didactics (25.7%), with an average of 3/4 chapters per book. This is then followed by chapters on curriculum design (11.3%) with an average of 2 chapters per book. Evaluation is also an element of interest with a frequency of occurrence of 10.6%, and an average of 1 to 2 chapters per text. Competences appear by interrelating the curriculum elements from the textbook by Herrán and Paredes (2008), with the analytical approach of the curriculum components and the summaries of teaching-learning components disappearing. The chapters on the teacher are of little importance (3.4%). And there are even fewer devoted to learners (0.9%). The compendium by Sánchez Huete (2008) focuses on attitudes and motivation.

Those regarding teaching methodology account for 11.3%. The "didactics of creativity" is an innovative topic, comparable to teaching methodology, which appears in two chapters (De la Herrán & Paredes, 2008; Sánchez Huete, 2008). Teaching techniques and strategies begin to appear frequently after the textbook by Lorenzo-Delgado (2011). They are grouped around either teaching methodologies and principles (Lorenzo Delgado, 2011; Navarro, 2011; Gómez & García, 2014; Domingo & Pérez Ferra, 2015), or around learning processes (Moral, 2010, 2019), with a frequency of occurrence of 6.4%. This score is higher due to the textbook by Paredes, Esteban & Rodrigo (2019), which includes 23 chapters on teaching competences, to work on different aspects of professional interest typical of a teacher's day-to-day — such as emotions, motivation, exams, workshops, etc. —, with a methodological approach. Otherwise, 86% of the works analysed do not include a specific chapter on practical skills or techniques. Teaching resources, which can also be comparable to teaching methodology, continue to be very important (6.4%). The teacher-student relationship and the classroom climate are other elements that receive little attention, with a frequency of occurrence of only 1.4%. Objectives and content show a similar frequency of occurrence (3% and 2.7%), similar to those who mix curriculum components in accordance with competences (3.4%). Teacher development (professional and personal) is linked to educational innovation. Sánchez Huete (2008) and Herrán and Paredes (2008) include "personal development of the teacher" alongside professional development. Innovation is important in all texts, with a frequency of occurrence of 7.3% and an average of one chapter per book. Examples of learning designs, sometimes presented as innovation strategies, are relatively scarce: 82% have no examples at all, but Domingo & Pérez (2015) give 10 examples/experiences, which increases the average.

Graph 1. Number of chapters (between 10) and average position by subject matter.



Source: Own elaboration.

In terms of the position of the chapters, 88% of the chapters begin with background on General Didactics. The second position is usually occupied by the curriculum design, the teacher or the student. Few start with the teacher or the student. In almost all of them, the content is dealt with after the objectives. In the "mixed" chapters on curriculum elements, where curriculum elements are systematised around competences, content comes after objectives and competences. The order of the chapters on curriculum elements, as well as within the "mixed" chapters, follows the technical-administrative tradition (Tyler, 1949): objectives, content, methodology-resources and evaluation, as Bolívar (2010) states.

In light of these results, the following question arises: What teaching theory underlies and is conveyed by these texts? Theory (from the Greek, *theōreō* to see) is necessary as, without theory, there is no knowledge, no training and no established practice. However, that contained in these texts is, in general, insufficient to train students in competences. The non-competence-based theory component in said texts is very high. The chapters on epistemology, origin and foundations of Didactics and on curriculum theory are the most numerous in relation to the rest, and notably misunderstood by prospective teachers. It would seem that the priority is the justification of General Didactics and its knowledge and the reason for its existence, excessively linked to the curriculum. In addition, and not infrequently, the chapters related to the foundations of learning design go back to its theories, curriculum design models, complexities and implications, instead of facilitating its construction, in some cases occupying up to 3 or 4 chapters per book, thus shying away from applied competence training.

Unlike other disciplines, most textbooks do not seem to aim for comprehensiveness regarding the basics and, therefore, almost all of them leave important elements unaddressed, even stating that the area does not deal with them. Others are biased from the very start due to the author's ego and only deal with what matters most to him or her, without the slightest interest in getting into practice. It follows that many of these works, despite their nature, are not representative of the discipline, or are only representative of a part or approach of such. Most of them are not very innovative in terms of chapters on new epistemological developments, which contradicts the theories set out in the chapters on teacher development and educational innovation.

We ask ourselves today, as we did 30 years ago, if it is necessary for an early years, primary and secondary school teacher to know, with this degree of detail, epistemology, paradigms, foundations, the didactics-curriculum dialectic, curriculum theory, teaching and design model, etc. Today we question whether such content, addressed in this way, is really so crucial for competence-based exercise of the profession. Some of the content seems to develop a discourse that is not focused on the level of education for which it is intended. It would seem to be the remnants of teaching projects with an improper epistemology, which will do nothing to show the

usefulness of General Didactics. Some of the content includes contradictions, inconsistencies, errors, even educational errors.

The curriculum elements emphasised and addressed the most are evaluation and teaching methodology. Objectives and content are by far the least important issues. Competence-based teaching has led to the clustering of isolated curriculum elements around competences. It would seem that the didactic discourse of competences overshadows the analysis of the other elements. Nevertheless, texts such as those by Medina and Mata (2009), or Moral (2010, 2019), maintain the analysis of these elements, without the functional clustering. It is noteworthy that, in the mixed chapters, they are presented one by one, linearly, sequentially and with little interconnection with one another.

Regarding the order of the chapters, and within the aforementioned traditional (Tylerian) sequence, it is important to note that content always comes after objectives, and that evaluation closes the series, even in most of the mixed chapters. This reflects the continuing existence, whether express or latent, of the tradition regarding content in Spain. Few researchers in the area defend content, as it is understood that it undermines the identity of General Didactics, when this discipline is full of its own content. Traditionally, there has been a tendency to devalue content (Angulo and Blanco, 1994; Gimeno, 1981; Gimeno and Pérez Gómez, 1992). Rodríguez-Diéguez (1980) believed that the greatest merit of the taxonomies of objectives was "having succeeded in shifting the focus of interest in teaching from content and information to skills of different kinds", and added, "we are currently witnessing a revival of "educational formalism", a new concern for formal skills rather than content" (p. 77).

Gimeno (1981) stated that:

> Content-centred education" is the epithet of so-called "traditional" pedagogy. For us, the advantage of separating objectives from content ... is that it emphasises that content is a means to achieve something and not an end in itself ... In other words, the role of content is minimised and it is placed at the service of something. (p. 170)

Subsequently, detractors of the "Pedagogy by Objectives" approach emerged in favour of competences. Bolívar (2010) abandons planning by objectives and considers that, although the competence-based approach does not involve rejecting the importance of content, or entail a didactic planning process, it does constitute a basis for the specific development of curricula: "Competences play an integrating role, organising content in terms of what the student is expected to be able to do. As such, they reorganise the didactic elements according to what they want them to acquire" (Bolívar, 2010, p. 177).

On the contrary, Zabalza (1995) defended that priority should be given to content in learning design:

> The new primary school, both Spanish and European, must be built upon a reassessment of learning content (on a

> re-dimensionalisation of the importance of "knowledge") and teaching-learning techniques. I imagine that this statement may be controversial, and that agreement on this issue is not widespread. However, it is becoming a common principle across Europe, and not among conservative education movements, as some would like in order to dismiss it, but rather in progressive positions on education. We had reached such laxity with regard to content that, for many, what mattered least was *what* was studied, as long as it was done in a creative, free and enjoyable way for the students. (p. 296)

The above comments illustrate, in contrast, the priority trend in the reference texts on General Didactics: "learning by doing" (Dewey, 1902). Competences, action and different methodologies are the main themes in the texts reviewed. There is barely any emphasis placed on the importance of content for learning design (Zabalza, 1995). Only the textbook by Moral (2019) recognises the importance of such. From his perspective, focusing on objectives, competences and activities as the most important elements is like building a house starting with the roof. Action, without the training and conceptual structure on which to base thinking, feeling and acting, makes no educational sense (Novak, 2010).

Secondary school teachers have shown opposition and resistance to the competence-based approach, arguing that it undervalues content (Bolívar, 2005). And what about primary school teachers? They do not react in the same way. Is it that a solid knowledge base for thinking is not built at these levels? What is done at these stages? Activities, play? As González-Sanmamed and Fuentes (2011) highlight, when referring to the most deeply-rooted beliefs in the teaching culture, it is understood that: "Teaching is easy, and being trained to teach is about learning how to do things (organising games, carrying out activities)" (p. 55). Although, at the same time, it is bewildering: "given how easy it seemed to teach and how hard it is for students to learn" (González-Sanmamed, 2009. p. 71).

5. Conclusions

The complaints of prospective teachers regarding excessive teaching of theory, which does not effectively prepare them to be trained in teaching competences, seem justified given the current competence-based teaching model. This is confirmed by the fact that, in the works examined, the relative weight of epistemological content and curriculum theories is unbalanced, with a persistent tendency to place value on theoretical aspects as opposed to applied aspects. There is a prominent tendency to consider, in depth, the curriculum components of teaching methodology and evaluation over others, of at least the same importance, such as the figure of the teacher, to whom little attention is paid, or the student, who is almost entirely forgotten.

The chapters are generally ordered according to the technical-administrative tradition: epistemology and curriculum theory, objectives, content, methodology, and evaluation. This order reflects the real prioritisation of the curriculum com-

ponents, impacting on the teaching of the syllabus and, in turn, on the acquisition of competence-based learning. In this article, another flexible order open to innovation has been proposed for learning design. It places value on semantic memory and conceptual construction as the basis for meaningful learning, and the development of creative and autonomous student thinking (Novak, 2010; Sousa, 2017; Weinstein & Sumeracki, 2019). This order begins by firstly considering the student, followed by content, objectives, evaluation, methodology and competences. Placing content first does not mean going back to the traditional content model criticised by Rodríguez-Diéguez (1980) or Gimeno (1981), since content is not simply an end in itself. On the contrary, content retention should be considered a means to foster meaningful learning, as it serves as a basis for building the conceptual structure that underpins semantic memory (Sousa, 2017).

Although the limited influence of these texts on the training of university professors and lecturers in the field of General Didactics is acknowledged, they are epistemological reference works that are key and thorough for teacher training and the definition of the area. The need to find and acknowledge a common approach is important for the scientific discipline underpinning teachers' basic pedagogical knowledge (Shulman, 2005).

Knowledge regarding learning design is both technical and strategic, and requires elements to be combined harmoniously via teaching innovation. Their coordination and interdependence would help us to understand the learning design process, both at the second level of curriculum realisation and in the syllabus or class programmes and in the teaching units and other methodological proposals.

For the above reasons, the design of a General Didactics textbook must be carefully considered, in collaboration with Spanish education publishers who are well-established with a high level of accomplishment. To this end, we propose debatable guidelines to increase how educative they are and update them in accordance with the competence-based teaching model, in order to foster fruitful formative learning experiences for students:

- Effectively connect the textbooks to the list of professional competences, thus facilitating the construction of well-founded, practical and professional pedagogical knowledge.

- Eliminate any ancient, superfluous theories that are unrelated to the interest and professional practice of prospective teachers.

- Functionally link the chapters on theory and those that include examples of learning designs.

- Aim for a certain comprehensiveness regarding key aspects, balancing topics of interest to the author's ego with what is necessary for the student's practical training, and do not fail to include key areas in the field, which may give the impression of disciplinary carelessness or negligence.

- Seek epistemological harmony between chapters to avoid conceptual and vocabulary-related conflicts, especially in multi-authored works.

- Order the chapters according to a well-founded teaching theory, as the order of the factors affects the product.

- Avoid any potentially manipulative or indoctrinating ideological bias, in the interests of maximum pedagogical respect for students, teacher training and the meaning and sense of education or training.

- Dare to innovate, risk including innovative areas at the forefront of pedagogical knowledge which support the epistemological development of the area, consistent with the author's own proposals on educational innovation.

- Validate the text with experts and a suitable pilot project before publication in order to effectively contribute to competence-based training, aiding, right from the very start, the construction of scientific, self-critical, critical, practical and useful knowledge for the teaching profession.

- Propose authentic and consistent teaching, having previously put into practice what is proposed for the prospective teacher.

Building General Didactics textbooks according to these conditions could increase their professional potential and help to reduce the epistemological distance between Psychology, Neuroscience, General Didactics, Specific Didactics and the Practicum. The psychological and neuroscientific foundations of learning are prerequisites for the pedagogical training of a prospective teacher. A subject such as General Didactics cannot be taken before or at the same time as them, or in the same term as Specific Didactics. Quality training in teaching competences requires a special link between General Didactics and the Practicum. We propose strengthening this link between the General Didactics and Practicum subjects by means of valid, reliable and high-quality instruments of observation, action and evaluation, and increased coordination or unification of sections in teaching guides.

The situation described above calls for healthy pedagogical self-criticism, with a self-training, radical and causal approach. Self-criticism, far from being exceptional and a source of conflict for mediocre teachers, should be a scientific and professional habit, as it honours those who practise it. If it is a question of training, the leadership of its practice could logically lie with General Didactics teacher and/or researchers. However, it is not easy, for four reasons related to non-conventional training content, comparable to General Didactics: the difficulty in self-criticising; the fact that self-criticism only makes sense if it is followed by rectification (practice), which requires a particular professional maturity; the tendency of human beings to think in dual terms, and the fact that we are faced with a persistent didactic traditionalism, the historical roots of which end up in our training leaving room for improvement.

References

Anderson, L. W., & Krathwohl, D. R. (Eds.) (2001). *A taxonomy for learning, teaching, and assessing*. Longman.

Bolívar, A. (2005). Conocimiento didáctico del contenido y didácticas específicas [Pedagogical content knowledge and specific didactics]. *Profesorado*, *9* (2). 1-39.

Bolívar, A. (2008). *Didáctica y currículum: de la modernidad a la postmodernidad [Didactics and curriculum: from modernity to postmodernity]*. Aljibe.

Bolívar, A., & Pérez, P. (2019). Políticas educativas sobre el profesorado [Education policies on teachers]. In A. de la Herrán, J. M. Valle, & J. L. Villena (Coords.), *¿Qué estamos haciendo mal en la educación?* (pp. 25-35). Octaedro.

Consejo Escolar del Estado [State School Council] (2015). *El profesorado del siglo xxi [Teachers in the 21st century]*. Spanish Ministry of Education and Science.

Council of the European Union (2018). *Council recommendation of 22 May 2018 on key competences for lifelong learning*. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=-CELEX:32018H0604(01)&rid=7

Darling-Hammond, L., & Oakes, J. (2019). *Preparing teachers for a deeper learning*. HEP.

Dewey, J. (1902). *The child and the curriculum*. Chicago-Press.

Egido, I., & López, E. (2016). Condicionantes de la conexión entre teoría y práctica en el Prácticum de Magisterio [Constraints regarding the connection between theory and practice in the Teacher Training Practicum]. *Estudios sobre Educación, 30*, 217-237. https://doi.org/10.15581/004.30.217-237

European Commission (2004). *Implementation of «Education and Training 2010» Work Programme. Key Competencesfor Lifelong Learning. A European Reference Framework.* https://step4-sfc.eu/IMG/pdf/201509_a_integrer_dans_le_site_basicframe.pdf

Gairín Sallán, J., Díaz-Vicario A., del Arco Bravo, I., & Flores i Alarcia, O. (2019). Efecto e impacto de las prácticas curriculares de los grados educación infantil y primaria [Effect and impact of the curricular work placements forming part of the degrees in early years and primary education]. *Educación XX1, 22* (2), 17-43. https://doi.org/10.5944/educxx1.21311

González-Sanmamed, M. (2009). Una nueva oportunidad para la formación inicial del profesorado de educación secundaria [A new opportunity for the initial training of secondary school teachers]. *Revista de Educación, 350*, 57-78.

González-Sanmamed, M., & Fuentes, E. (2011). El prácticum en el aprendizaje de la profesión docente [The practicum in the learning of teaching professionals]. *Revista de Educación, 354*, 47-70.

Hall, R. (2020). *Mixing methods in social research. Quantitative, qualitative and combined methods*. Sage.

Hattie, J., & Clarke, S. (2019). *Visible learning feedback*. Routledge.

Heredia, A. (2015). Los manuales de Didáctica en español entre 1900-1970 [Manuals on Didactics in Spanish between 1900-1970]. **revista española de pedagogía**, *73* (260), 121-139. https://revistadepedagogia.org/wp-content/uploads/2015/01/260-07.pdf

McTighe, J., & Willis, J. (2019). *Understanding by design meets neuroscience*. ASCD.

Novak, J. (2010). *Learning, creating and using knowledge*. Routledge.

Ritchart, R., & Church, M. (2020). *Making thinking visible*. Jossey Bass.

Schwab, J. (1970). The practical 3: Translation into curriculum. *School Review, 81* (4), 501-522.

Shulman, L. (2005). *Conocimiento y enseñanza. Fundamentos para una nueva reforma* [Knowledge and teaching. Foundations for a new reform]. *Profesorado, 9* (2), 1-28.

Sousa, D. (2017). *How the brain learn*s. Corwin.

Tyler, R. (1949). *Basic principles of curriculum and instruction*. Chicago-Press.

Walter, D., & Soltis, F. (2004). *Curriculum and aim*s. College-Press.

Weinstein, Y., & Sumeracki, M. (2019). *Understanding how we learn*. Routledge.

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