Successful practices in developing cross-curricular competences in vocational training centres in the Basque Country

Prácticas de éxito en el desarrollo de competencias transversales en centros de Formación Profesional del País Vasco

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Abstract

At present, competence-based approaches are gradually becoming the main axis of the European Union's general education policies and of pedagogical practice at several educational levels. Nonetheless, it is important to analyse how the various general prescriptive directions that can easily be identified at the normative level are being put into practice in order to establish an in-depth understanding of them. This study presents the results of a research project with the aim of analysing and describing successful practices in the development of Cross-curricular Competences (CCC) in VET centres in the Basque Country. The methodology used is case studies in which a quantitative approach (a questionnaire for teachers) is used, followed by a qualitative approach comprising interviews and focus groups with management teams, students, and teachers. Analysis of the results reveals three typical cases relating to the forms and modes of institutionalization of CCCs: at the level of individual teachers where the development of CCCs is in the hands of teachers in an isolated and diffused way; at the cycle level where the teachers of a cycle as a group direct the process within a context of methodological change; and at the centre level where the development of CCC becomes an institutional feature involving all of the centre's teachers. Each of these cases results in a particular understanding of the concept of CCCs as well as diverse ways of materializing them in teaching-learning processes. The results provide key information that enables critical reflection on the shift from individual experiences to more collaborative institutional and teaching models for developing CCCs in vocational training.

Keywords: Cross-curricular competences, basic skills, employability, vocational education and training, Basque Country.

Resumen

En la actualidad los enfoques basados en competencias se están convirtiendo paulatinamente en el eje orientador de las políticas generales de educación de la Unión Europea así como de la práctica educativa en los diversos niveles de enseñanza. Sin embargo es necesario analizar y comprender en profundidad cómo se están materializando en la práctica todas las orientaciones prescriptivas generales que fácilmente identificamos en el nivel normativo. Este estudio presenta los resultados de una investigación cuyo objetivo ha sido analizar y caracterizar las prácticas de éxito en el desarrollo de las Competencias Transversales en los centros de FP del País Vasco. Se ha trabajado metodológicamente desde el estudio de caso en el que se ha llevado a cabo una aproximación cuantitativa (cuestionario al profesorado) y, posteriormente, un acercamiento cualitativo a través de entrevistas y grupos de discusión a equipos directivos, alumnado y profesorado. El análisis de los resultados revela tres casos tipo basados en las formas y modos de institucionalización de las CT: a nivel de profesorado individual, donde el desarrollo de las CT está en manos del profesorado de forma aislada y difusa; a nivel de ciclo, donde el profesorado de ciclo en conjunto es quien dirige el proceso dentro de un contexto de cambio metodológico; a nivel de centro, donde el desarrollo de las CT se convierte en una característica institucional que implica a todo el profesorado del centro. Cada uno de ellos produce una comprensión particular del concepto mismo de CT así como maneras diversas de materializarlas en los procesos de enseñanza-aprendizaje. Los resultados aportan claves que posibilitan la reflexión crítica sobre la transición de experiencias individuales a modelos más colegiados de trabajo institucional y docente para el desarrollo de las CT en la Formación Profesional.

Descriptores: Competencias transversales, competencias básicas, empleabilidad, educación, formación profesional, País Vasco.

1. Introduction

Since European institutions adopted the concept of "functional literacy" (UNESCO, 1970), the need to reconsider the levels of training that are sufficient to enable people to have appropriate socialisation in a setting of rapid global change has become apparent. This reconsideration has come hand in hand with the emergence of the concept of competences and the establishment of a series of key and cross-curricular or generic competences (Perrenoud, 2004; Gimeno-Sacristán, 2008; Monereo, 2009; Poblete, Bezanilla, Fernández-Nogueira, Campo, 2016; Villardón, 2015). These have gradually become the guiding principle for educational practice across the different levels (Bolívar, 2008) and for the general education policies of the European Union (Delors Report, 1996; OECD DeSeCo project, 2005; European Commission, 2012).

Key and cross-curricular competences involve integrating the knowledge, skills, attitudes, and values that a person brings into play in a given situation, proving that he or she is capable of resolving it. Despite the ambiguous nature of their conceptualisation (Van der Klink, Boon, & Schlusmans, 2007), competences have

become established as a useful concept for examining the space between academic education and the educational requirements of the labour market (Prahalad & Hamel, 1990; Mulder, 2007; Rué, 2009). In turn, they are seen as a major foundation stone on which to base a new type of education-training that makes social change possible in the knowledge society (Hargreaves, 2003). The newer concept of employability supports this idea, presupposing that individuals who have developed this type of competence will be more capable and better prepared to meet the needs of a changing and somewhat unpredictable labour market (Knight and Yorke, 2003; Rodríguez, 2012).

The concept of competence also has a notable presence in the field of vocational education and training (VET). In the monographic issue of the *Revista Europea de Formación Profesional* dedicated to competence-based vocational education and training, Peter Grootings (1994) concludes that the competence-based paradigm has emerged from the new ways of organising work, and so it is necessary to integrate this focus into vocational education and training programmes. Similarly, Antonio Arguelles and Andrew Gronczi (2000) state that this perspective has become the model to follow to resolve the problems of vocational education and training in more and more countries. Competence-based VET has also become one of the central areas of work for CEDEFOP (Descy and Tessaring, 2001). Since 2000, the Education and Competence Studies Group of the University of Wageningen (Netherlands) has noted in its comparative analysis of countries

such as the United Kingdom, Germany, France, and the Netherlands that, with differing focuses and emphases, the system has spread and become the axis of vocational education and training policies (Mulder 2014).

This new direction reached Spain in 1999 with the creation of the Instituto Nacional de la Cualificaciones (National Qualifications Institute-INCUAL). This initiative was accompanied by regulatory frameworks with the Qualifications and Professional Training Organic Act 5/2002 and after that the Sustainable Economy Act 2/2011. Both these laws aim to develop regulated, occupational, and ongoing training and map out career paths for workers, enabling recognition of the competences acquired and facilitating mobility in training and employment.

Competences-based VET has seen significant growth in the Basque Country, encouraged by the policies implemented by the Instituto Vasco de las Cualificaciones y Formación Profesional (Basque Institute for Qualifications and Professional Training, Decree 119/1998, of 23 June) and the Agencia Vasca para la Evaluación de la Competencia y de la Calidad de la Formación Profesional (Basque Agency for Evaluating Competences and the Quality of Professional Training, Decree 62/2001, of 3 April). In 2005 Tknika[1] was launched, a centre for innovation in vocational education and training and lifelong learning that plays a fundamental role in galvanising methodological innovation with special attention on developing cross-curricular competences. Its contribution therefore joins that of the Asociación de Centros de Formación Profesional

(Association of Professional Training Centres, HETEL, 2008) that defined ten basic competences when developing training cycles, providing guidelines for their methodological development and evaluation. Confebask, the Basque Business Federation (2010), identified thirteen key competences in Basque workers, reinforcing this idea and highlighting the importance of involving economic stakeholders in shaping this process (Weigel, Mulder, & Collins, 2007).

However, as well as the positive views of competence-based focuses, there are also those who emphasise the risks involved in implementing them, as several national and international critical voices have noted (Gimeno-Sacristán, 2008; Barnett, 2001; Coll, 2007). The loss of knowledge and acquisition of skills, the risk of decontextualized use of competences without consideration of the more socio-cultural aspects, and the difficulties relating to evaluation are just some of the problems that have been identified and that must be confronted.

The competence-based focus must, therefore, question curriculum content and the teaching-learning process, thus underlining the need for pedagogical innovations to facilitate this process (Eurydice Report, 2012). Learning tasks are particularly important as they must integrate knowledge, skills, and attitudes, and have an authentic character; in other words, they must be relevant, reflect the complexity of reality, and interconnect with larger tasks. In this way, new (active) methodological proposals appear, often interdisciplinary in nature, in which students are the centre of the educational

process, and so going beyond the traditional discipline-based teaching system (Imbernon & Medina, 2006; Moya, 2008).

Consequently, designing and implementing a form of VET based on competences seems like a complex task which involves overcoming obstacles such as: diversity in the perception of the concept of competences; an excessive trend towards standardisation; the difficult relationship between schools and businesses; traditional styles of design and implementation; evaluation; the new role of teachers; and redesigning the organisation and management of centres (Biemans, Wesselink, Gulikers, Schaafsma, Verstegen, & Mulder, 2009).

From this, we can infer that the competences-based model has become a trend but that it stills lacks guidelines, instructions, and examples to help understand the key elements underpinning the most effective and successful practices. The obstacles that its practical implementation present are the tip of an iceberg that requires indepth research so that policies, programmes, and practices can be based on more solid and scientific foundations.

This framework raises the questions that shape this research: What is happening with cross-curricular competences (CCC) in VET centres? To what extent are teachers and Basque centres implementing practices in which CCCs are developed appropriately? What are these practices like and what lessons can we extract from them?

The Gaitasunez research project[2] had as its objective the in-depth analysis and understanding of how the general

prescriptive CCC guidelines of international, state, and/or autonomous region frameworks are really being put into practice in the Basque Country's VET centres.

Between 2012-2015 a detailed analysis of good practices detected in the case study of Basque VET was carried out with an open perspective, and an awareness of the complex and multidimensional character of the term "good practice" itself (Escudero, 2009). Taking into account the fact that practices will be interpreted and reconstructed by people in their contexts and that they are not implemented in a linear fashion, much less imposed by decree, three typical cases were distinguished that provide a model for best practice to help teachers to situate their own context, reflect, and propose processes for change and improvement. The specific objective of this article is to present the general pedagogical characteristics that define the three typical cases identified.

2. Methodology

The methodology focused on designing a strategy to enable detailed analysis of the Basque Country's network of VET centres. A case study was selected to make possible an in-depth exploration of the phenomenon in its natural settings (Stake, 1998; Vázquez & Angulo, 2003) and a detailed understanding of the different educational realities (Yin, 2003) and their specific characteristics. The case, therefore, comprises all of the specific processes for developing cross-curricular competences that are implemented in the Basque Country's VET centres.

This examination of the context and successful practices was initially done using quantitative techniques to prepare a road map that would help to identify the centres that work on CCCs systematically. Based on this initial approach, qualitative techniques were then used, carefully listening to the voices of the protagonists (teachers and students) and capturing the elements that help with both the detection, and the profiling and interpretation of successful practices.

2.1. Research subjects

The selection of centres and research participants varied according to the phases of the project. In the first phase of identifying centres, 473 teachers participated from 48 of the 61 FP centres (from a finite population of 5500 teachers) who completed an online questionnaire about the CCCs covered in their educational centres.

In phase two, 177 students from 16 previously selected centres, as well as their respective management teams, and 21 teachers (from a smaller group of 7 centres) took part in discussion groups, group interviews, and narrative accounts. These techniques made it possible to record their experiences and opinions of the development of CCCs at the centre, family, cycle, field, and subject-area levels. The students represented covered a total of 33 training cycles (intermediate and higher levels, first and second year) from almost all of the professional pathways. Care was also taken to maintain gender diversity in the constitution of the groups.

2.2. Project phases and data collection and analysis techniques

The research phases developed from the need to identify successful practices and locate the practices which were regarded as successful. The initial population (all of the VET teachers in the Basque Country) was reduced to a much smaller number of teachers who, according to the contrasting sources (management teams and students), were felt to be involved in successful practices.

The first phase combined a literature review with empirical research through an online questionnaire (*google.docs*). This questionnaire featured 36 questions, some closed and others open-ended, relating to training received in relation to CCCs, the level to which these competences are developed with students, the use of active methodologies and evaluation techniques, and the relationship with educational innovation processes. The quantitative data were analysed using SPSS for Windows (version 21). A frequency analysis was performed in which all of the questions relating to the themes and objectives of the research were examined to identify the teachers with whom there has been systematic development of CCCs as well as the levels and groups of students with which this is the case.

The second phase examined in greater depth the identification and description of successful practices using qualitative techniques. In particular:

— Group interviews with the management teams of the centres being studied that were initially selected

(Bisquerra, 2012) to compare the results from the questionnaire and identify each centre's institutional approach to CCCs.

— Discussion groups with the teachers from the centres where work on CCCs has an institutional and pedagogical support framework, either at the cycle level or the centre level. A group discussion was carried out in which different trends and repeating patterns in opinions on the development of CCCs (Krueger, 1991) could be identified, compared, and debated.

— In-depth interviews with teachers whose practices were considered successful (by themselves, by management teams, and by students) but that did not have a more comprehensive institutional framework. These were reflective accounts that served both to identify elements of the past and present as well as future expectations for the object of study (Gómez, Latorre, Sánchez, & Flecha, 2007).

Between the two phases discussion groups were held with the students to validate the data derived from the questionnaire (and eliminate centres where the views of the teachers and students did not match) and also to interpret the qualitative data produced in the profiling of the successful practices.

Some general aspects were established to guide the interviews and discussion groups, with a specific semi-structured script being prepared for each group including questions relating to ways of viewing and defining CCCs, ways of conceiving the teaching, relationships with

the students, difficulties when working on CCCs, key elements and factors for success, etc. The "NVivo" (version 10) program was used to codify and analyse the data. This program facilitated the processing and organisation of qualitative data (Sánchez Gómez & García Valcárcel, 2001), and the construction of the category system. Node matrices were prepared for each of the dimensions based on the participants' attributes.

Credibility, transferability, confirmability, and ethical criteria were used (Guba & Lincoln, 1985). Ethical issues were managed through an informed consent protocol with all participants in which the purpose of the research and the subsequent processing of the data were explained in accordance with Spain's Personal Data Protection Act of 13/12/1999. Participant anonymity has been maintained throughout the whole research process.

3. Results

In this article, we set out the quantitative and qualitative results that enable us to describe successful practices in developing CCCs and analyse characteristics more directly related with pedagogical questions such as their conceptualisation, levels of systematisation and institutionalisation, and the teaching-learning process.

3.1. Conceptualisation of CCCs

Between teachers, students, and the management teams of the centres there is no single way of understanding or defin-

ing CCCs. Nonetheless, this diffuse character does not prevent them from being a generalised term in VET in the Basque Country.

CCCs are present in all centres in some form, given that they are implemented and evaluated. According to the results obtained through the survey, virtually all of the teachers work on the three CCCs included in the questionnaire, namely, "learning to learn", "team work", and "innovative and creative thinking". Just 1.7% of the teachers say that they do not work on these competences "at all".

"Team work" is the competence worked on the most with 40% of teachers saying that they work on it "a fair amount", followed by "learning to learn" with 29%. The competence that is least worked on is "innovative and creative thinking", with 29% teachers saying that they work on it "a little bit".

Students corroborate, in this case qualitatively, the data recorded by the teachers regarding the presence of CCCs and awareness of their importance in professional training. This collective identifies team work, communication, independence, knowing how to "fail", etc. as important. For example:

"... in the world of work, team work is vital. Basically, if you won't work in team, you might as well be planting lettuce, where nobody relies on you, but I think that wherever you are you need, you depend on someone else or even if it isn't the same company, you are always working to an external benchmark of another person, of another company, so in the end that is

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team work too. Because you are pursuing a common objective." (Student 3)

"Punctuality, team work, and also knowing how to talk, because in the end this can be an obstacle for work". (Student 5)

It is very important to note that CCCs are present in teachers' practice in VET centres; one sign of this is that students are equally aware of its value for their professional future.

3.2. Level of systematisation and institutionalisation of CCCs

In this study, practices in which the teachers, students, and management teams, all independently state that CCCs are intentionally covered are regarded as successful. However, these successful practices differ greatly. A detailed in-depth study enables us to differentiate three levels of institutional systematisation and development of CCCs that we profile in the following typical cases:

FIGURE 1. Type cases of successful practices in the development of CCCs in VET centres.
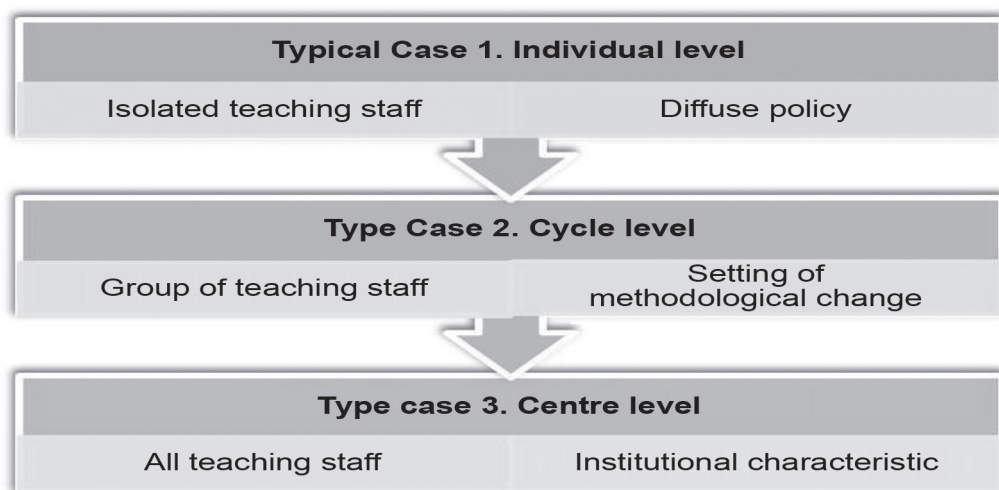
Source: Own elaboration.

Type case 1. At the level of individual teachers: cases where students recognise CCC work in a module or with a specific teacher. These occur in a more or less isolated and diffuse fashion as there is no explicit centre policy aimed at developing CCCs.

In this context CCCs are seen as specific to subjects such as FOL (Formación y Orientación Laboral —Labour Training and Guidance), EIE (Empresa e Iniciativa Emprendedora— Business and Entrepreneurial Initiative) because they "lend themselves" to these subjects but

that they do not "affect" them and are not covered so much by other teachers. Consequently, CCCs are present but are not cross curricular; they are restricted to an isolated niche in the curriculum where teachers work individually. Most of the centres interviewed are of this type.

Type case 2. At the cycle level with all of the teachers engaged in developing CCCs. Immersion occurs in a setting of a more general methodological move towards challenge-based learning. In this level the teaching team decides which competences they believe are vital to develop and teachers have an in-depth involvement in implementing them. It is difficult to establish how the shift from individual ways of working to more collaborative ones occurs and it is very likely that there is no single pattern. Instead, at a more operational level cycle teachers start working on CCCs based on criteria such as ease of marking on a daily basis and evaluation in all of the modules. In some cases, the cycles are in centres where there is an explicit policy for the institutional development of CCCs but most do not have this. A quarter of the centres interviewed correspond to this typology. In most cases, type case 2 is currently linked to the programme of High Performance Cycles led by Tknika.

Type case 3. At the centre level, a certain degree of systematisation of CCCs to apply across the whole centre is implemented. These centres are characterised by having a centre policy for the development of CCCs so that it has become an institutional feature. In these centres, high performance cycles coexist with cycles and teachers who maintain a more traditional organisational structure and pedagogical practice. In this typical case, management teams have systematised pedagogical work with CCCs, establishing an order and a hierarchy among them for the whole centre, and the teachers adopt this classification and make it their own. While the competences do vary between centres and teachers, they all more or less include the following: team work, problem solving, self-learning, responsibility, attendance and punctuality, organisation, relationship with others, and communication (verbal and non-verbal communication). One teacher explains it as follows:

"In other words, all of us, I think, work on the same competences, more or less, which are the technical competences for each subject area, right? We allocate 50% of the overall mark to them if we do challenge-based work. And then there are three other strategic ones, which are the ones I mentioned earlier: team work, problem solving, and self-learning. And then we have other basic or cross-curricular competences: responsibility, organisation, relationships with others, and then verbal and non-verbal language. For example, in the high performance cycles we have also worked on these competences in more depth. Why? Because that's what they are going to ask of you in the outside world" (Teacher 1, type 3).

The type 3 cases show significant activity around the evaluation of CCCs, with a portion of the mark, sections adapted to the professional profile are drawn up, and there is intensified monitoring of the evidence.

3.3. Characteristics of the teaching-learning processes

According to the data obtained in the survey of teachers, the most common methodologies for CCC development are: project-based learning (22.5%), problem-based learning (17.5%), simulations (17.5%), case studies (15%), cooperative learning (10.5%), analytic approach (9%), others (1%.), none used (7%). More traditional strategies are maintained for evaluation, but others also appear that can form alternative pathways more in accordance with a competence-based training approach. Specifically, 49.5% state that they use written exams "a fair amount" and 27.5% "a lot"; 48% use practical exams "a fair amount" and 27% use it "a lot". Oral presentations are used "a little bit" by 35%, and 41% have used written dossiers.

In general terms, we can note that a common characteristic of these practices is that they are fundamentally directed towards active learning and project and/or challenge-based learning. Even so, we must clearly distinguish between the meaning and the form it acquires in each of the three levels, as will be shown below.

3.3.1. Projects in Type case 1: practical learning, learning by doing, and experiential learning

In this case, the teachers tend to organise small projects, challenges, activities, etc. that are based around students and their learning. The teachers try to structure their teaching to make it more participatory, active, and constructive, guided by the idea of putting the students in a situation that is similar to what they will encounter in the real world. The work is done using ideas such as: adapting content to reality; construction by the students; reaching out to the reality that the students know; using their language and referents; adaption to particular rhythms; ensuring a close relationship with students; encouraging motivation; and preparing them for real situations through placements, learning by doing and experiential learning, in which the methodology and learning are centred around the students. In the words of one teacher:

> "... In the end, you try to be someone who creates a situation, a space, you create time for them to get together. But they have to take the lead, they have to see each other, they have to consider it again, they have to assimilate it." (Teacher 3, type 1)

In this context, the teachers talk about projects, although in many cases they become more like exercises. It is interpreted as working towards an objective, and the priority is to follow the students' pace and make the activity theirs.

> "And so, what I try to do and I always think about is, above all, that they have to feel very comfortable, they have to be convinced that the project we are going to do is theirs, whether it is good, bad, average, whatever it is like, because if they don't feel that it is theirs, I'm sorry, it can't be mine. The project they do has to be theirs, they have to feel ownership even if it seems like an aberration to me." (Teacher 2, type 1)

The teachers in type case 1 place great emphasis on the educational relationship, in building a bridge between them, the module, and the students to create an intense encounter that leads to meaningful learning.

3.3.2. Projects and challenges in type case 2 structuring learning and creating situations

In this case, the CCCs are located in a more general framework of cycle methodological innovation centred on challenge-based cooperative learning. This is the case with High Performance Cycles (ETHAZI)[3]. Teachers see the need to modify the methodology to be able to handle a coherent learning process in line with the effective development of CCCs, always understanding that this is what businesses in the area demand. A challenge is not an exercise; it is an open situation that allows multiple endings and keeps all of the involved parties in a situation of some uncertainty. One teacher explains it as follows:

> "So, you know where you are going to start and how, but you don't know how you are going to finish a challenge or when you will finish it; a good challenge, of course. A challenge that you design in a moment, in the end that isn't a challenge; it is an exercise, and it's not about designing exercises, but designing challenges with different alternatives, different durations. So that one group can come up with one solution, and another group will probably come up with another completely different one that is just as good, just as easy". (Teacher 2, type 2)

In this case the teachers' efforts are directed towards the ability to solve problems. Students and teachers both see the challenge as a natural learning environment for developing CCCs, where students acquire ever greater levels of independence.

In the High Performance Cycles, there is no single way of creating and developing challenges. Each cycle has its own "life" depending on its context. Working with challenges involves pursuing common objectives and going through various phases. Each cycle designs which phases the project will have and how they will be covered as well as how they will be graded. There is no guide that works and can be replicated in various places, but instead there are some very general common threads and key elements that are repeated in all of the cases studied. Specifically: a vision of the cycle and of building a shared language, developing real challenges with tangible end products, flexible learning spaces and the ability to manage time independently, and ensuring commitment from the students.

Ultimately, we face a situation in which attention has moved from the "fragmented" development of CCCs to the development of the ability to resolve challenges as an ability that brings the other competences together. Teachers realise that the key is condensed in a methodological change that creates the conditions for students to develop an activity, challenges, which have a strongly marked professional character that constantly brings them closer to the world of work.

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3.3.3. Projects and challenges in Type case 3. Diversity and methodological decisions at the centre level

In this case CCCs are worked on using mixed strategies. At the level of specific cycles that use a challenge-based methodology, type 2 practices usually coexist with more "local" and individual type 1 practices but form part of an explicit policy of systematic development of the competences in question. We are, therefore, speaking of a case in which the methodological strategies vary according to cycles, modules, teachers, etc.

Two centres show the profile of type case 3 and are a good empirical example from which to extract knowledge. As a specific characteristic, it is worth observing the use of various overarching strategies for developing CCCs such as "the zero challenge" and what we have called "the minimal methodological unit".

The zero challenge is a test-situation where the whole centre works together. Above all it is experienced as a general initiation to group work, but it has the effect of assigning joint teacher-student time for working on a challenge.

What we call the "minimal methodological unit" strategy, for its part, tries to ensure that in each subject at least one teaching unit is covered in a challenge format. As the teachers recognise, in these cases the limit of the programming is felt much more strongly when working with a challenge, meaning that the challenge is more forced and less natural. In the words of one teacher:

"This is what was decided years ago at the centre level, that every subject area should have a teaching unit, at least one, in a challenge format, in a format with evaluation by competences etc., and this is what I comply with. I would perhaps like to do more things, but there is also the reality of the programming, right? In other words, in the end I think that it is a very valid methodology, but not for all of the students, because in the same way that there are some students who have told me that really enjoy these challenges, there are others who have said, hey, when are we going back to normal classes. ... I think that if we had a little bit of flexibility regarding the objective and fulfilling 100% of the programming, etc., that might encourage us not to do the teaching unit that this rule establishes, but that we could propose more challenges a bit more naturally". (Teacher 4, type 3)

This teacher's reflection puts very interesting final note on practices at an individual level and those that have already moved on to new forms of curriculum at the cycle level. Both can exist and can coexist, the question is for how long and for what purposes. To some extent, this reveals the tension present in the move from an individual subject area practice to a collaborative cycle practice. Official curriculum instructions, which are predominantly seen as content areas that are listed and worked on successively over time in an analytic way, coexist with a comprehensive and overarching didactic strategy —the challenge— that requires time, maturation, creativity, and specific technical knowledge. It is difficult to combine the two within a minimal unit such as the subject area. Moving from one to

the other is only possible, according to the cases analysed, when the cycle teachers, for whatever reasons and under whatever circumstances, decide to assume overall responsibility for the teaching and learning process and manage them in an autonomous and creative way. The role of the centres' management teams in these cases has been support and coverage. Without this twin "bottom up" and "top down" relationship, the process of change would not be possible.

4. Discussion and conclusions

The promotion at a European level of broad training policies based on competences is having a visible impact on VET in the Basque Country at the level of teachers, students, and management teams, as the results of research show. Nonetheless, the prescriptive guidelines that come from the different legal, regulatory, and professional levels are implemented in particular ways according to context, and in this sense, it is important to note that there is no shared idea that gives meaning to the concept of competence, or to cross-curricular competence, as is noted in the literature (Biemans *et al.*, 2009; Mulder, 2007; Riesco, 2008). There are no universal CCCs that are valid for everyone, but instead there are contextual and particular readings for each professional profile and teaching context (Weigel *et al.*, 2007). In this sense, the experiences analysed highlight active efforts by the teachers to reinterpret competences based on the profile and type of the student body, and also the teaching tradition and culture, something that in turn shows a dynamic and open perspective regarding teaching work and didactic planning.

This diffuse character underlying the concept of competence does not prevent this from being a widely-used term in Basque VET. It can be noted that in educational centres CCCs "are present": they elicit interest, they are selected, put into practice, and evaluated by the teachers. Similarly, the students, perceive the presence of CCCs in their training. Team work appears predominantly. Creativity and innovation, and learning skills are more weakly perceived and need greater attention.

Nonetheless, the study reveals a multitude of "translations", different ways of overcoming the barriers noted by Biemans *et al.* (2009), and enables us to describe them as successful practices: at an individual level, where the teacher chooses to develop CCCs intentionally; at the cycle level, where the teaching team takes collective responsibility for the development of the overall teaching-learning processes; and at the institutional level, where an explicit centre-wide policy supports and guides the development of CCCs.

These successful practices coexist in the Basque system and can even appear simultaneously in a particular centre. From our perspective, they should be interpreted as different "states" in the development of CCCs, that are not necessarily successive or linear, but rather the embodiment of what it is possible to produce in a specific context.

The decision to work on CCCs is more orchestrated and is accompanied by the teaching team and/or the management

team in type cases 2 and 3. More conceptual, methodological, and relational systematisation and depth is attained as well as a greater awareness and perception of the value of CCCs among the students. Specifically, type case 3 has a role relating to the creation of favourable conditions (material, organisational, relational, and of status) for the development of CCCs.

Type case 1 is the most widespread and is very probably present in all centres, although it is difficult to detect in detail. It is the impetus that starts growth and movement towards other alternative forms of curriculum in the cycle.

Following the principles of the development model for competence-based learning presented by Wesselink, Biemans, Mulder, and Van den Elsen (2007), Wesselink, (2010), Sturing, Biemans, Mulder, and De Brujin (2010), and Mulder (2012) we could say that the features that characterise the typology of cycle are most relevant in aspects relating to defining competences, curriculum design with regards to professional problems, the relationship between learning and real life, the role of the teacher as educator and expert, and the attitude towards learning and professional identity. Nevertheless, aspects such as evaluation and students' own responsibility in the management of learning and knowledge still need greater development.

The results in terms of learning support seeing the type of cycle and particularly the experience of the High Performance Cycles as being of greater relevance and significance from the CCC perspective. Even so, we believe that the levels of satisfaction reflected in our study should, in future, be complemented by a more ex-

haustive analysis of the levels of attainment of competences in terms of learning outcomes and, in particular, from the perspective of employers and/or businesses that cooperate with the centres.

Finally, we should note the importance acquired by the gradual and progressive process of innovative experimentation by the teacher that makes critical reflection on long established curricula and didactic forms possible, as well as the transition from individual experiences to more collaborative models. Similarly, the need for cooperation and active support from the management of the centres as well as from the institutional framework (Escudero, 2012) is clear, such as that offered by Tknika and the sub-department responsible for VET.

Notes

1 TKNIKA is a centre promoted by the Sub-department of Professional Training and Continuous education of the Department of Education, Universities, and Research of the Basque Government. Through online work, and with the involvement of Vocational Education and Training teachers, this Centre develops innovation projects relating to the technological, educational, and management fields.

2 Gaitasunez Project "Buenas prácticas en el desarrollo de competencias clave en los centros de FP de la CAV" funded by the University of the Basque Country, as part of the Universidad-Sociedad call (US12/15), and cofunded by Ikaslan (Association of Public Professional Training Institutes – Asociación de Institutos Públicos de Formación Profesional). Developed within the Grupo de Investigación IkasGura (IkasGura Research Group – GIU 14/08).

3 The ETHAZI programme is one of the pillars on which the course of action for pedagogical innovation contained in the IV Plan Vasco de Formación Profesional (4th Basque Professional Training Plan) approved by the Basque Government in December 2014 is based: http://fpeuskadinews.com/es/index.html

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