The Entrepreneurial Competence in Primary School Curricula in Asturias (Spain): High ideals and sobering realities.

Diego Rodríguez, Iván [1], de la Iglesia Ordóñez, María del Canto [2], Hevia-Aza, Carlos [3] , ,Marcillaud, Priscille [4]

1) Valnalón, Spain

ivan@valnalon.com

2) Valnalón, Spain

mariadelcanto@valnalon.com

3) Colegio Sagrada Familia-El Pilar, Spain

carlosheviaza@gmail.com

4) Spain

priscilleam@gmail.com

Summary

The article discusses the positioning and framing of the entrepreneurial key competence in the regional Curriculum for Primary Schools in Asturias (Spain). Quantitative and qualitative content analysis of learning outcomes and evaluable learning standards, two key elements in the new curriculum, bring to the fore the lack of a clear learning progression for the development and acquisition of this key competence. The negative implications for programming and assessment of quality teaching and learning experiences in a competency-based curriculum are discussed and some potential courses of action are described.

Keywords: entrepreneurship education, creativity, curriculum, learning progression, key competence.

1. Introduction

According to latest reports “Entrepreneurship Education at School in Europe” (CE/Eurydice, 2016) and “Educación para el Emprendimiento en España. Año 2015” (Diego & Vega, 2016), entrepreneurial learning outcomes are highly fragmented and there’s an urgent need to develop logic and coherent progression models for the development and acquisition of the entrepreneurial competence.

Building on this recommendation, a teacher workgroup was set up under the aegis of one of our regional CPD Centres (CPR Cuencas Mineras) in order to better understand the framing and integration of key competence Sense of Initiative and Entrepreneurship in the new regional

curricula for primary education in Asturias (pop. 1.034.449), Spain. Research was undertaken during the 2015-16 School Year.

The rest of this paper is organized as follows. Section 2 describes the main features of the education system in Asturias (Spain), with particular reference to the decentralization and its influence in the curriculum development process. Section 3 describes the integration of the key competence in the new regional curriculum. Section 4 describes the data and method we used in conducting the analysis. The results of the quantitative and qualitative analysis are shown in Section 5. Finally, the last section reports the key conclusions, limitations and implications for policy and practice.

2. Curriculum development in Spain: A highly decentralised endeavour

By way of scenesetting, it is important to underline decentralization is a key feature of the spanish education system. The 1978 Spanish Constitution granted the central government the power to define the structure of the state's education system and its core curriculum, to regulate the requirements for the obtaining, issue and standardization of academic degrees and professional qualifications and to establish the basic rules to guarantee the unity of the Spanish education system. Yet, all other responsibilities in the sector were devolved to the regional governments. Educational powers were transferred to Asturias in 1999.

In terms of curriculum development, decentralization implies generic curricular frameworks are sequentially developed at national level and regional level. Firstly, the central government defines the National Education Act and a core curriculum that the regional Departments of Education shall subsequently modify and adapt to their own context and needs.

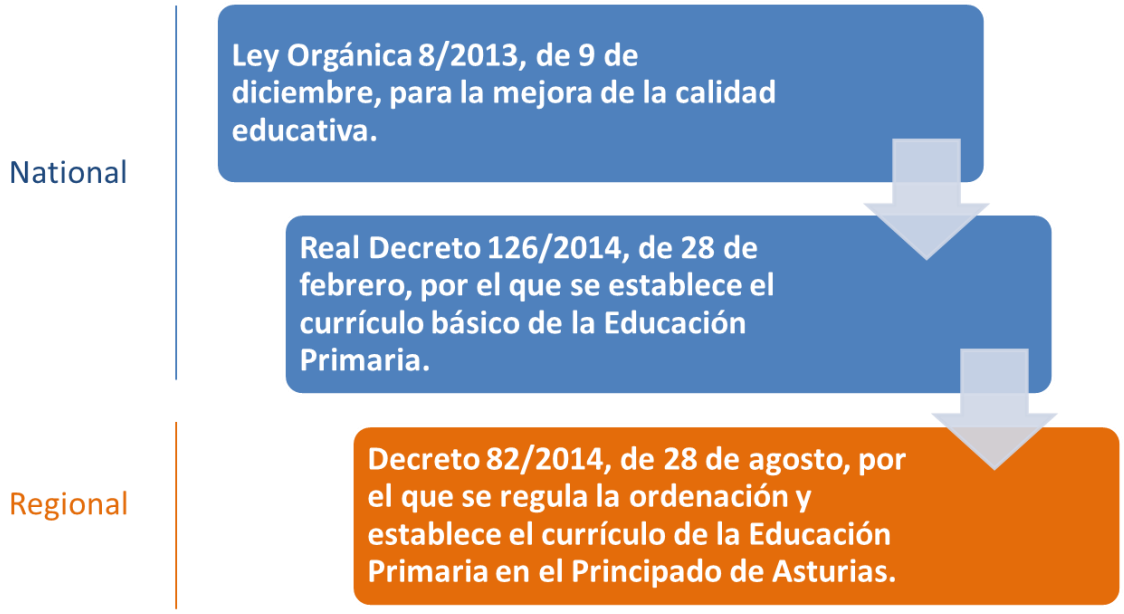

Figure 1 – Curriculum development process

The enactment of the Spanish Organic Law 8/2013 of 9 December, for the Improvement of Quality in Education (henceforth, LOMCE) has introduced some changes in the process. LOMCE classifies subjects in three different categories: Core subjects, specific subjects and regional configured subjects. The central government assumes almost full control in the definition

of contents for core subjects while regions are allowed to determine contents of specific and regional configured subjects. In any case, the State reserves the right to define learning outcomes and evaluable learning standards for core and specific subjects that determine academic expectations.

Asturias regional curriculum is structured in three main parts. The first section deals with the legal framework and operationalization of the Law at regional level. All subject areas (core, specific and regional) are covered in the next three sections. Curriculum for each subject is described in detail adhering to a similar structure: Methodology, Contents, Evaluation Criteria and Learning Outcomes. Last two sections provide general didactic reccomendations and timetable regulations.

3. Sense of Initiative and Entrepreneurship in the new regional curriculum

Just like its predecessors, LOMCE core curriculum and as a result, the new regional curricula follow the Recommendation of the European Parliament on Key Competencies for Lifelong learning (EC, 2007). "Sense of Initiative and Entrepreneurship" is featured in the list of 7 basic competences in Article 7 of the current regional curriculum. Shockingly, the regional text does not provide a full description of the main components of the competence that's included in a state-level guidance document, "Orden ECD/65/2015, de 21 de enero, por la que se describen las relaciones entre las competencias, los contenidos y los criterios de evaluación de la educación primaria, la educación secundaria obligatoria y el bachillerato." [Order ECD/65/2015 describing relationship between competences, content and evaluation criteria in Primary, Secondary and Upper Secondary Education] (henceforth, Order ECD/65/2015)

In line with other curricular documents across Europe, core and regional curricula adopt a broad definition of this key competence. Thus, entrepreneurially competent individuals are expected to be able to mobilise a certain set of knowledge, skills and attitudes to transform ideas into actions in a wide range of settings or domains. (Personal, social, school, work). The length of the list of knowledge, skills and attitudes can look overwhelming so Annex I of Order ECD/65/2015 summarises the central aspects needed to develop this key competence in four broad areas:

– *Creative and innovation capacity**: creativity and imagination,**; self-awareness and self-esteem; autonomy and independence; interest and effort; entrepreneurial spirit, initiative and innovation.* .

– *A pro-active capacity for **managing projects**: analytical skills; planning, organization, management and decision-making; problem solving; capacity to work independently and collaboratively inside a team; responsability; assessment and self-assessment.*

– *The capacity to **assume and manage risks** and deal with **uncertainty**: assess and assume risks; capactity to manage risks and uncertainty.*

– ***Leadership, independent work and teamwork** skills: capacity to lead and delegate; capactity to work individually and in teams; communicaiton and negotiation skills*

Given its cross-curricular nature, all subject areas are expected to contribute to its development. As a matter of fact, LOMCE introduces a new concept, the Competence Profile which can be described as the constellation of evaluable learning standards scattered across subject areas in the curricular text that can be directly linked to the development of a particular competence. In any case, this competence profile is not provided by official documents and teachers/schools are expected to single out which learning outcomes deserve to be included in the "competence profile".

Order ECD/65/2015 includes some methodological guidelines to facilitate the development of a

competence-based curriculum at school/classroom level but there is no specific advice for the competence "Sense of Initiative and Entrepreneurial Spirit". Further methodological tips are also found in the Regional Curricula both at general and subject area level but the message remains unchanged and a gamut of active methodologies such as project work, service-learning, cooperative learning or problem-based learning are endorsed as the most suitable vehicles for the acquisition of this key competence.

4. Design/Methodology/Approach

In order to gauge progression, we posed the following research questions:

- Q1- How is "Sense of Initiative and Entrepreneurship" key competence positioned and framed across subject areas and education levels (primary and lower secondary education) in the regional curriculum?
- Q2 How consistent and coherent are entrepreneurship-related learning outcomes across the curriculum?

In order to answer the first question, a content analysis of the 2014 Asturias Regional Curriculum was conducted to identify, enumerate, and analyze occurrences of entrepreneurship-related messages and message characteristics embedded in the text. As previously noted, the number of knowledge, skills and attitudes is staggering. In order to simplify the analysis and find some common ground, we compared 5 different competence models and selected the skills/attitudes most often quoted. The models consulted included 2 policy papers (EC, 2007, MECD, 2015) and 3 peer-reviewed articles (Muñiz et al, 2014, Rosendahl et al., 2012, Sánchez, 2013) .

The skills and attitudes considered by each model vary to a lesser or greater extent, but Creativity/innovation, Risk-taking/uncertainty and Self-efficacy/Self-esteem were the most oft-quoted features in all of them.

The sample consisted of the text of the Regional Curriculum for Primary Education (2014) available on the official website of Asturias Regional Ministry of Education. The document was subjected to a key-word search for the mentions of 4 dimensions commonly linked to the entrepreneurial competence using different stems for Creativity/Innovation, Self-Esteem/Self-Efficacy, Risks/Uncertainty. A fourth subdimension was included in order to encompass a sensible range of learning outcomes explicitly mentioning taking initiative and/or being enterprising/entrepreneurial that otherwise would not have been considered for analysis. Synonyms were added following the careful reading of preliminary search results. The number of synonyms for each subdimension varied from two synonyms to four synonyms.

Dimension	Search term / Stem in spanish	English translation
Creativity/Innovation	[creat_], [inno_], [imagin_], [original_]	[creat_], [inno_], [imagin_], [original_]
Risk/Uncertainty	[riesgo], [incertid_]	[risk], [uncertain_]
Self-efficacy/Self-esteem	[confianza] [autoconfianza] [autoestima] [motivación]	[trust] [self-esteem][motivation]
Proactivity	[iniciat_] [emprend_]	[initiat_] [enterpr_]

Figure 2 – Complete wordlist in spanish languages and their English translations

The occurrence of search terms was carefully mapped in a two-dimensional matrix representing courses on the horizontal axis and subject areas on the other enabling quick and easy identification of entrepreneurial-related learning outcomes and other curricular components andas a result the expected contribution of different subjects and levels to the acquisition and development of this key competence (competence profile).

Dimensión: CREATIVIDAD

Criterios de búsqueda: [creat_], [inno_], [imaginación][original_]

ÁREAS DEL BLOQUE	Criterios de evaluación y estándares de aprendizaje						
ASIGNATURAS TRONCALES	1 EP	2 EP	3 EP	4 EP	5 EP	6 EP	ESTÁNDAR
Ciencias de la Naturaleza				B2.C4.R1 Planificar de forma autónoma, responsable y creativa actividades de ocio, individuales y en grupo.			B2.C4. E3 Planifica de forma autónoma y creativa actividades de ocio y tiempo libre, individuales y en grupo
Ciencias Sociales	B1.C9. Desarrollar la creatividad y el espíritu emprendedor, aumentando las capacidades para aprovechar la información, las ideas y presentar conclusiones innovadoras.						
						B1.C9.R3 Mostrar actitudes de confianza en su propia persona, sentido crítico, iniciativa personal, curiosidad, creatividad en el aprendizaje y espíritu emprendedor. B3.C13.R1 Desarrollar la creatividad y valorar la capacidad emprendedora de los miembros de una sociedad	B1.C9.E1 Muestra actitudes de confianza en sí mismo, sentido crítico, iniciativa personal, curiosidad, interés, creatividad en el aprendizaje y espíritu emprendedor que le hacen activo ante las circunstancias que le rodean B3.C13.E1 Desarrolla la creatividad y valora la capacidad emprendedora de los miembros de una sociedad.
Lengua Castellana y Literatura	B1. C7. Memorizar y reproducir textos breves y sencillos cercanos a sus gustos e intereses, utilizando con corrección y creatividad las distintas estrategias de comunicación oral que han estudiado.						
		B5.C4. R1 Recrear y reescribir textos narrativos y de carácter poético (adivinanzas, refranes…) utilizando modelos con originalidad e	B2.C1.R2 Utilizar recursos expresivos y creativos simples, siguiendo modelos, en tareas de recitación	B2.C1.R2 Utilizar recursos expresivos y creativos simples, siguiendo modelos, en tareas de recitación			B1.C7.E1 Reproduce de memoria breves textos literarios o no literarios cercanos a sus gustos e intereses, utilizando con corrección y creatividad

Figure 3 – Mapping Learning Outcomes. Double-entry grid (Subject area + School Year)

The final analysis excluded sections describing regulations, methodology, competence and content knowledge areas. Instead, the focus was placed on learning outcomes/evaluable learning standards. This new curricular component. defined as "observable and measurable specifications of evaluation criteria that sanction what the student must know, understand and do in each subject" is deemed to be pivotal in the design of comparable and standardised tests, a central yet contested aspect of the recently adopted curriculum. In this case, the research team was interested in the context and meanings associated with messages than with frequency or location search terms occur. Analytical work was preceded by the filtering of hits according to their relevance. Irrelevant uses of the terms led to the exclusion of some search results.

Subsequent qualitative content analysis allowed checking for consistency and coherence of entrepreneurial-related learning outcomes across subject areas and progression across levels and provide some answers to Q2.

5. Findings

Quantitative analysis

The keyword search shed a total of 77 entrepreneurial-related learning outcomes in the curriculum. Sub-dimensions are unevenly represented with more than half of the occurrences (51%) corresponding to learning outcomes related with creativity. At the other end of the spectrum, risk-taking and dealing with uncertainty are barely mentioned at all (1%).

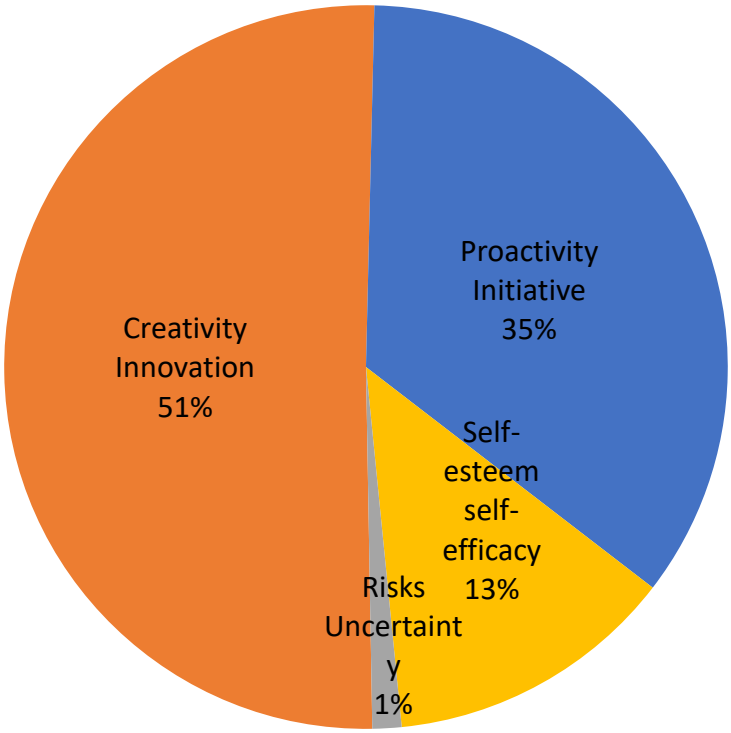

Figure 4 Distribution of Learning Outcomes across selected sub-dimension

Quantitative analysis does also show an steady increase in the number of entrepreneurial-related learning outcomes across the years. As the pupil moves along Primary Education, the references to some of the sub-dimensions of the key competence become more prominent with the exception of risk-taking/uncertainty constantly absent or almos absent across the years.

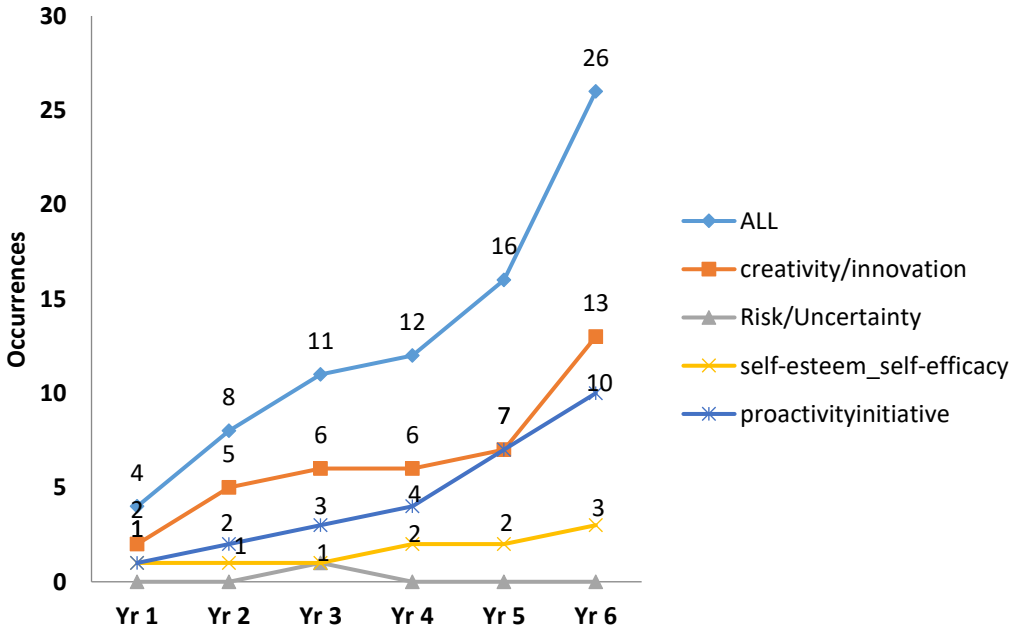

Figure 5- Entrepreneurial related Learning Outcomes per School Year

The average number of entrepreneurial learning outcomes is 11.2 per subject. Yet, their distribution is uneven across subject areas. Mostly, we found Humanities subjects topping the list. The subject "Social & Civic Values" shows the highest occurrences (28 learning outcomes) "Asturian Language & Literature" (21) and "Social Science" (17) complete the Top 3. In stark contrast, STEM subjects do consistenly fall below average. Quite surprisingly this is also true and somewhat unexpected for the Arts where creativity is the only sub-dimension represented in the 7 learning outcomes identified. Keyword search produced no hits at all for "English"

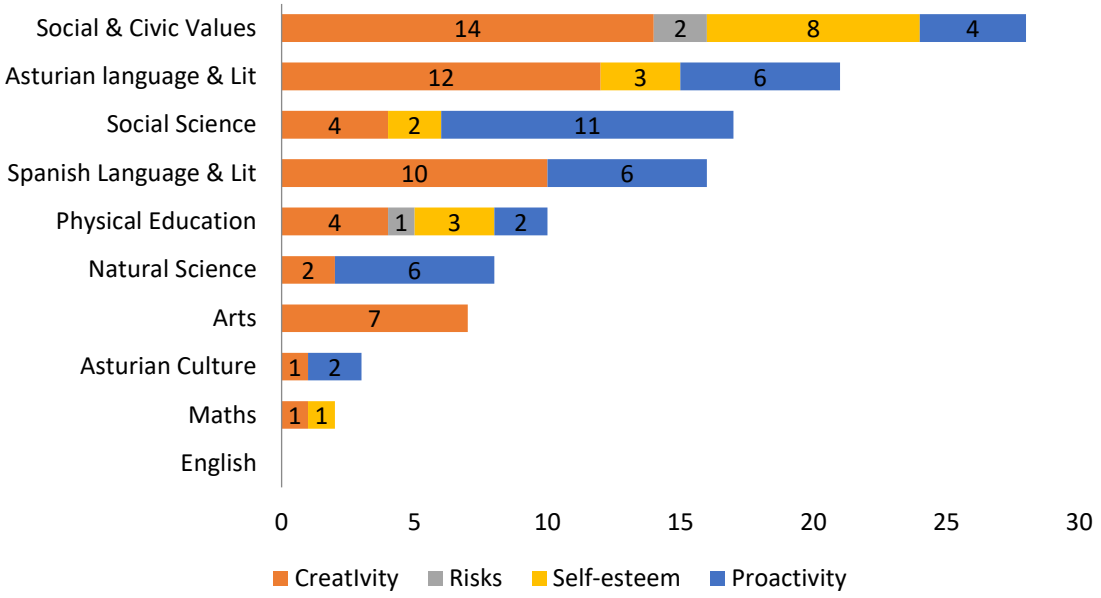

Fig 6 - Entrepreneurial-related Learning Outcomes + Evaluable Learning Standards across Subject Area

Qualitative analysis: Making sense of entrepreneurship-related learning outcomes

Horizontal coherence: Entrepreneurial Key Competence across subject areas

Horizontal coherence is understood here as the aligment of learning outcomes between subjects and/or subject-transcending themes within domains of the same educational level. (Thijs A. & Akker J. van den, 2009). Quantitative analysis showed the contribution of different subjects in the same school year to the acquisition of the key competence were certainly patchy and unbalanced putting into question the alleged cross-curricular dimension. The qualitative analysis reinforces the message by evidencing a lack of coherence across subject areas. The table below shows creativity-related learning outcomes for Year 3:

Subject Area	**Learning Outcome (creativity)**
Spanish	*"Utilizar recursos expresivos y creativos simples, siguiendo modelos, en tareas de recitación"* *[Use basic creative and expressive resources, following modes in oral recitation tasks]*

Social and Civic Values	*"Utilizar el pensamiento creativo en el análisis de problemas y el planteamiento de propuestas de actuación." [Apply creative thinking to analyse problems and suggest action proposals]*
Physical Education	*"Dialogar y cooperar para preparar propuestas creativas en grupo" [Discuss and cooperate in a team to prepare creative proposals]*
Asturian language	*"Anticipar soluciones personales, avanzando hipótesis de actuación de los personajes y/o imaginando desenlaces diferentes en la lectura creativa de textos narrativos y líricos" [Anticipate personal solutions, advancing hypothetical courses of actions of the characters and/or imagining different outcomes in the creative reading of narrative and poetry texts.]*

Figure 7 - Primary Education – Year 3 - Entrepreneurial-related Learning Outcomes stems [CREAT_/INNOV_/IMAGIN_/ORIGINAL_]

While some overlap is observed, the most evident feature is the learning outcomes are broadly defined. If the teacher's job is "to create a learning environment that supports the learning activities appropriate to achieving the desired learning outcomes" (Biggs, 2003) , such generic statements hinder the constructive alignment of relevant teaching and learning activities and assessment tasks that improve the creative capacity of Primary School pupils.

Vertical coherence. Entrepreneurial Key Competence across school years

Next, we focused on determining to what extent mapped learning outcomes were aligned between subsequent educational stages. (Thijs A. & Akker J. van den, 2009). Or to put it differently, to ascertain some sense of progression in the acquisition of the key competence.

In order to obtain a clearer picture of progression, we adopted a more comprehensive approach and attempted at establishing a logic sequence of previously mapped learning outcomes from different subject areas. The sequence below shows a series of learning outcomes with a clear emphasis on creativity as process.

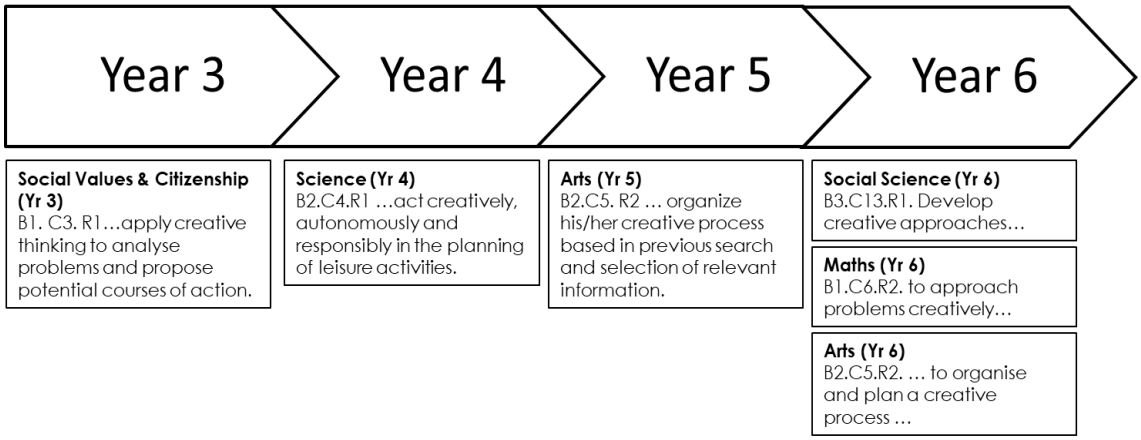

Figure 8 - Primary Education – Creativity-related Learning Outcomes across school years stems [CREAT_/INNOV_/IMAGIN_/ORIGINAL_]

Leaving aside discussions on creativity being domain general or domain specific, and bearing in mind in any case this may not matter in educational contexts (Plucker & Beghetto, 2004) a string of loosely defined learning outcomes falls short in signposting a clear pathway for the acquisition of this skill.

A generic statement like "Apply creative thinking to analyse problems and suggest action proposals" (Year 3, Social & Civic Values) seems pretty in tune with the abridged definition of the key competence, "turnining ideas into action" but, at the same time it raises a whole new set of questions: What does this mean in this particular subject? Could the creative process be further split into phases? What are the creative tools or processes in this particular stage that the pupil is expected to master? Is the creative process linked to a particular context or is there an expectation of transfer in line with the cross-curricular nature of the competence? If that's the case, is there any sort of coordination across subjects? All these question are left unanswered in the curricular text and teachers seem to be left to their own devices in connecting the dots.

Evaluable Learning Standards and Competence Profile.

Having reached this point, we finally looked at the Evaluable Learning Standards (henceforth, ELS), the "observable and measurable specifications of evaluation criteria that sanction what the student must know, understand and do in each subject". ELSs are meant to be the yardstick measuring achievement of learning outcomes at the end of Primary Education.

According to Order ECD/65/2015 all subject areas are expected to contribute to the development of transversal key competences. The constellation of ELS scattered across the curriculum that can be directly linked to the development of a given competence is defined as the Competence Profile. This profile is expected to facilitate the assessment of the competence but once again, schools and teachers are to bear the burden of selecting the appropriate learning outcomes and create their own competence profiles. This is totally inconsistent with the central role ascribed to key competences in the preliminary sections of the text.

In any case, we proceeded to create a competence profile with the ELS located in our mapping exercise (See Annex) . A first impression is that this is essentially a time-consuming endeavour that requires a coordinated effort from teaching teams. This puts into question its operationalisation at classroom/school level.

The resulting competence profile contains a staggering number of 31 Evaluable Learning Standards. A single trace of entrepreneurial-related ELS is nowhere to be found in 2 subject areas (English, Maths). Truth be told, ELS overlap to a lesser or greater extent evidencing a lack of coordination between curriculum development teams for different subject areas as exemplified below.

> *"Planifica de forma autónoma y creativa actividades de ocio y tiempo libre, individuales y en grupo. [The pupil will be able to plan independently and creatively leisure activities working alone or in a team] (Natural Sciences)*
>
> *"Utiliza el pensamiento creativo en el análisis de problemas y el planteamiento de propuestas de actuación." [The pupil will be able to analyse problems and suggest potential course of action using creative thinking"] (Social & Civic Values)*
>
> *"Organiza y planea su propio proceso creativo partiendo de la idea, recogiendo información bibliográfica, de los medios de comunicación o de Internet, desarrollándola en bocetos y eligiendo los que mejor se adecúan a sus propósitos en la obra final, sin utilizar elementos estereotipados, siendo capaz de compartir con otros alumnos el proceso y el producto final obtenido" [The pupil will be able to organize and plan its own creative process generating*

ideas, gathering information from traditional media or internet, developing drafts and choosing those most fit-for-purpose avoiding stereotyped elements. The pupill will be able to share with peers the process and final product.] (Arts)

In some cases, the overlap is total and learning outcomes are faithfully reproduced in two or more subject areas.

"Manifiesta autonomía en la planificación y ejecución de acciones y tareas y tiene iniciativa en la toma de decisiones" [The pupil plans and implements actions and tasks independently and shows initiative in decision-making.] (Natural Science)

"Manifiesta autonomía en la planificación y ejecución de acciones y tareas y tiene iniciativa en la toma de decisiones" [The pupil plans and implements actions and tasks independently and shows initiative in decision-making.] (Social Science)

"Manifiesta autonomía en la planificación y ejecución de acciones y tareas y tiene iniciativa en la toma de decisiones" [The pupil plans and implements actions and tasks independently and shows initiative in decision-making.] (Asturian Culture)

Even when overlap and replication could be thought of as weaknesses in curriculum design, at the same time they provide a promising starting point to simplify and reinforce the coherence of competence profile. This is the case even for some ELS in the same subject area as shown in the example below for Natural Science:

"Manifiesta autonomía en la planificación y ejecución de acciones y tareas y tiene iniciativa en la toma de decisiones." [The pupil plans and implements actions and tasks independently and shows initiative in decision-making.]

"Manifiesta autonomía en la planificación y ejecución de acciones y tareas y desarrolla iniciativa en la toma de decisiones, identificando los criterios y las consecuencias de las decisiones tomadas [The pupil plans and implements actions and tasks independently and shows initiative in decision-making identifying criteria and consequences of decisions made."

By way of conclusion, we would like to emphasise the entrepreneurial competence is a loosely defined construct and this jeopardises its curricular embeddment. Identified learning outcomes and evaluable learning standards fail to act as depictions of particular levels of proficiency nor do they fulfil a "signaling" function guiding the efforts of teachers in the design of activities and assessment.

Thijs & Akker state that "in addition to defining the most relevant content, it is the remit of curriculum developers to arrive at a coherent organization of content, both horizontally and vertically" (Thijs A. & Akker J. van den, 2009). Our analysis demonstrates the new Regional Curriculum for Primary Education has certainly not achieved this goal when it comes to the curricular integration of the entrepreneurial key competence. Implications for policy and practice and some potential ways forward are considered in the next section.

6. Originality/value

From a practical perspective, the methodology and tools used to undertake this analysis enable a collaborative and critical engagement with curricular documents that reinforces teacher agency and engagement in curriculum-making (Priestley & Drew, 2016). Additionally, this diagnostic exercise may represent a vital first step to improving coordination, progression and assessment of the entrepreneurial key competence in Primary Schools in Asturias closing the gap between the intended, the implemented and the attained curriculum.

The collaborative protocol described in the article enables a much needed debate among teachers from different subject areas and paves the way for a more rounded-up and coherent approach to the development and acquisition of this key competence across subjects, levels, stages. By simplifying and making sense of expected learning outcomes, the protocol paves the way for a better understanding of what can be currently considered an essentially policy-driven construct (Baird et al, 2017) and the constructive alignment of teaching and learning activities and assessment tasks (Biggs, 2003).

Same reasoning and process could be applied to identify and overcome obstacles affecting the curricular integration of other competences (eg. Learning to Learn, Social and Civic Competence, Digital Competence).

Policy-wise, this piece of research fills a gap by proposing a competency profile based on entrepreneurial-related learning outcomes currently present in the curriculum. The lack of a coherent integration of this competence highlights the need to modify curriculum-making processes at regional level. It is the role of regional education authorities to devise new ways to coordinate efforts of expert teacher groups appointed to develop curriculum for different subject areas.

In any case, the picture will remain incomplete unless educational authorities provide schools and teachers clear guidelines on learning progression for this particular competence, that is to say, "a carefully sequenced set of building blocks that students must master en route to mastering a more distant curricular aim." (James Popham, 2007). This will only be achieved by funding action-research projects and enabling the design of a sound learning progression for the competence. It shall necessarily begin as a theory-based construct (Baird et al., 2017), a conceptual framework informed by findings from fields of research as diverse as cognitive science, education, social psychology and entrepreneurship. Through ongoing data collection and analysis this hypothetical model will slowly morph into a more evidence-driven progression (Kim & Scoular, 2017).

In this sense, the Assessment & Teaching of 21st Century Skills project (ATCS21) led by the University of Melbourne represents a particularly inspiring development. ATCS21 concentrated on defining a framework of 21st century skills (Hesse et al., 2015) and developing assessment methods that will form the basis for 21st-century curricula. At the same time, exemplifies the grueling and rigorous effort required to create first-rate learning progressions.

Limitations

The authors are perfectly aware that what happens in classrooms cannot be extrapolated or inferred from regional curricula alone (Heilmann & Korte, 2010). The truth behind this statement is particularly more acute if we consider research took place at a time when LOMCE had only been partially implemented. Even so, it would be unrealistic to rely on time alone to fix the problems detected here.

It can be argued some learning outcomes may have slipped through the cracks. The absence of explicit references to the search terms and stems selected here does not completely exclude the possibility of drawing some links between other learning outcomes and the entrepreneurial competence.

A similar analysis was undertaken with the Secondary Education Curricula but this is beyond the scope of this paper. However we would like to conclude this section by drawing reader's attention to transitions across key stages (Primary to Secondary). As expected, the Secondary Schools Curriculum shows a blatant disregard towards any progress made at the end of Primary Education. The disconnection between learning outcomes in the final year of Primary Education (Year 6) and the first year of Secondary Education (Year 7) is appalling.

In order to brige this gap, curricular analysis would have to be complemented with:

- a regional survey on teachers' beliefs and attitudes towards entrepreneurship, creativity and innovation and how they translate into daily teaching and assessment practices.
- a simple and ready-to-use empirical progression model
- specific training on practical ways to embedding and assessing this competence with the participation of teachers from all subject areas

But high ideals collide with sobering realities which brings us back to the title of this article. On the one hand, we have to bear in mind "Sense of Initiative and Entrepreneurship" is just one among a group of seven key competences, all meriting the attention of teachers with an already overloaded agenda . On the other hand, the alleged cross-curricular/transversal nature of this key competence merits further discussion or at least requires a more nuanced interpretation when translating policy into practice. Given the fact that the Primary Schools Curriculum is overloaded with content (NCAA, 2010) and that time is a quintessentially scarce resource, it may be not only unrealistic but altogether counterproductive to require teachers from all subject areas to contribute to the development of this competence. But even if one is willing to abide by the rule, having entrepreneurial learning outcomes inconsistenly and incoherently scattered all over the curricular text and the lack of clear, specific and practical guidelines does not facilitate curricular integration of this competence at all.

Yet, the situation described here is only a small part of a bigger problem that has to do with the implementation of competency-based curricula. LOMCE (2013) could be seen as the latest chapter of a process of curricular reform that can be traced back to the enactment of the previous law, LOE (2006). More than a decade later, and in spite of the hammering insistence and training efforts the Why, What and more importantly the How of Competency-based Curriculum remain obscure to most teachers and as a result, it is poorly implemented in schools.

7. References

Assessment & Teaching of 21st Century Skills. (2012) Retrieved from: http://www.atc21s.org/

Baird, J., Andrich, D., Hopfenbeck, T., & Stobart, G. (2017) Assessment and learning: fields apart?, Assessment in Education: Principles, Policy &Practice, 24:3, 317-350, DOI: 10.1080/0969594X.2017.1319337

Bereczki, E. O. (2016). Mapping creativity in the Hungarian National Core Curriculum: a content analysis of the overall statements of intent, curricular areas and education levels. The Curriculum Journal, 27(3), 330-367.

Biggs, J. (2003). Aligning teaching for constructing learning. Higher Education Academy, 1-4.

CE (2007). Competencias clave para el aprendizaje permanente. Un marco de referencia europeo.

CE/EACEA/Eurydice (2016). Entrepreneurship Education at School in Europe. Eurydice Report. Luxembourg: Publications Office of the European Union

Decreto 82/2014, de 28 de agosto, por el que se regula la ordenación y establece el currículo de la Educación Primaria en el Principado de Asturias

Diego, I., Vega, J.A (2016) La educación para el emprendimiento en el sistema educativo español. Año 2015. Colección EURYDICE ESPAÑA-REDIE. MECD.

Heilmann, G., & Korte, W. B. (2010). The Role of Creativity and Innovation in School Curricula in the EU27. A content analysis of curricula documents, European Commission Joint Research Centre Institute for Prospective Technological Studies.

Hesse, F., Care, E., Buder, J., Sassenberg, K., & Griffin, P. (2015). A framework for teachable collaborative problem solving skills. In Assessment and teaching of 21st century skills (pp. 37-56). Springer Netherlands.

James Popham, W. (2007) All About Accountability / The Lowdown on Learning Progressions *Educational Leadership Vol 64, N7, p. 83-84.* Retrieved from. http://www.ascd.org/publications/educational-leadership/apr07/vol64/num07/The-Lowdown-on-Learning-Progressions.aspx

Kim, H. & Scoular, C. (2017) Learning Progressions: Road Maps for 21st Century Students – and Teachers. Stanford Social Innovation Review. Accessed 17 Jul 2017. https://ssir.org/articles/entry/learning_progressions_road_maps_for_21st_century_students_and_teachers?platform=hootsuite

MECD (2014) Real Decreto 126/2014, de 28 de febrero, por el que se establece el currículo básico de la Educación Primaria

MECD (2015) Orden ECD/65/2015, de 21 de enero, por la que se describen las relaciones entre las competencias, los contenidos y los criterios de evaluación de la educación primaria, la educación secundaria obligatoria y el bachillerato.

Muñiz, J. et al (2014) Perfil de personalidad emprendedora en jóvenes: componentes y evaluación"Psicothema 2014, Vol. 26, No. 4, 545-553

National Council for Curriculum and Assessment (NCCA), (2010). Curriculum Overload in Primary Schools: An overview of national and international experiences. Retrieved from: http://ncca.ie/en/Publications/Reports/Curriculum_overload_in_Primary_Schools_An_overview_of_national_and_international_experiences.pdf

Peña, P. S., & Ollé, A. S. (2009). Evaluating the effects of decentralization on educational outcomes in Spain. Universitat de Barcelona, Facultat d'Economia i Empresa.

Plucker, J. A., & Beghetto, R. A. (2004). Why Creativity Is Domain General, Why It Looks

Domain Specific, and Why the Distinction Does Not Matter. In R. J. Sternberg, E. L. Grigorenko, & J. L. Singer (Eds.), Creativity: From potential to realization (pp. 153-167).

Priestley, M., & Drew, V. (2016). Teachers as agents of curriculum change: closing the gap between purpose and practice. In *European Conference for Educational Research*, Dublin, 23-26 September 2016.

Rosendahl Huber, L., Sloof, R., & Van Praag, M. (2012). The effect of early entrepreneurship education: Evidence from a randomized field experiment.

Rubio, J. G. (2015). El proceso de descentralización educativa en España. *Edetania*, 48, 203-216. Retrieved from: https://dialnet.unirioja.es/descarga/articulo/5349095.pdf

Sánchez, J. C. (2013). The impact of an entrepreneurship education program on entrepreneurial competencies and intention. Journal of Small Business Management, 51(3), 447-465.

Thijs A. & Akker J. van den (Eds) (2009).Curriculum in development. SLO Netherlands Institute for Curriculum Development.

8. Annexes

Subject Area	Evaluable Learning Standards
Natural Science	*B2.C4. E3 Planifica de forma autónoma y creativa actividades de ocio y tiempo libre, individuales y en grupo.* *B1.C2. E1. Manifiesta autonomía en la planificación y ejecución de acciones y tareas y tiene iniciativa en la toma de decisiones.* *B2.C4.E4. Manifiesta autonomía en la planificación y ejecución de acciones y tareas y desarrolla iniciativa en la toma de decisiones, identificando los criterios y las consecuencias de las decisiones tomadas*
Social Science	*B1.C9.E1 Muestra actitudes de confianza en sí mismo, sentido crítico, iniciativa personal, curiosidad, interés, creatividad en el aprendizaje y espíritu emprendedor que le hacen activo antelas circunstancias que le rodean* *B1.C9.E2. Manifiesta autonomía en la planificación y ejecución de acciones y tareas y tiene iniciativa en la toma de decisiones.* *B3.C13.E1 Desarrolla la creatividad y valora la capacidad emprendedora de los miembros de una sociedad.*
Spanish Language & Literature	*B1.C7.E1 Reproduce de memoria breves textos literarios o no literarios cercanos a sus gustos e intereses, utilizando con corrección y creatividad las distintas estrategias de comunicación oral que han estudiado.* *B3.C1.E3 Escribe diferentes tipos de textos adecuando el lenguaje a las características del género, siguiendo modelos , encaminados a desarrollar su capacidad creativa en la escritura.*
Maths	--
English	--
Physical Education	*C15.E2 Demuestra autonomía y confianza en diferentes situaciones, resolviendo problemas motores con espontaneidad, creatividad.* *B5.C2.E1. Realiza actividades físicas y juegos en el medo natural o en entornos no habituales, adaptando las habilidades motrices a la diversidad e incertidumbre procedente del entorno y a sus posibilidades*
Social & Civic Values	*B1.C3.E1. Utiliza el pensamiento creativo en el análisis de problemas y el planteamiento de propuestas de actuación.* *B1.C3.E2 Propone alternativas a la resolución de problemas sociales.*

Subject Area	Evaluable Learning Standards
	B1.C3.E3 Sabe hacer frente a la incertidumbre, el miedo o el fracaso. *B1.C6.E2. Realiza propuestas creativas y utiliza sus competencias para abordar proyectos sobre valores sociales.* *B2.C8,E3 Detecta y enjuicia críticamente prejuicios sociales detectados en su entorno próximo expresando las conclusiones en trabajos creativos.* *B2.C9.E4 Expone mediante historias creativas las características de la amistad.* *B3.C19.E3. Realiza producciones creativas sobre las consecuencias de no pagar impuestos.* *B3. C22. E3 Realiza trabajos creativos sobre la necesidad del aire no contaminado para la salud y la calidad de vida.* *B3.C25.E2 Reflexiona sobre la influencia de la publicidad expresando las conclusiones mediante trabajos creativos.* *B1.C2.E3. Genera confianza en los demás realizando una autoevaluación responsable de la ejecución de las tareas.* *B1.C6. E1. Participa en la solución de los problemas escolares con seguridad y motivación.* *B2.C9.E2. Establece y mantiene relaciones emocionales amistosas, basadas en el intercambio de afecto y la confianza mutua.* *B3.C1.E1. Establece relaciones de confianza con los iguales y las personas adultas.* *B3. C7.E3. Justifica sus actuaciones en base a valores personales como la dignidad, la libertad, la autoestima, la seguridad en uno mismo y la capacidad de enfrentarse a los problemas.* *B1.C6.E5. Razona la importancia de la iniciativa privada en la vida económica y social.* *B3.C18. E3. Propone iniciativas para participar en el uso adecuado de bienes naturales razonando los motivos.* *B1.C3.E3. Sabe hacer frente a la incertidumbre, el miedo o el fracaso.*
Arts	*B2.C5.E1. Organiza y planea su propio proceso creativo partiendo de la idea, recogiendo información bibliográfica, de*

Subject Area	Evaluable Learning Standards
	los medios de comunicación o de Internet, desarrollándola en bocetos y eligiendo los que mejor se adecúan a sus propósitos en la obra final, sin utilizar elementos estereotipados, siendo capaz de compartir con otros alumnos el proceso y el producto final obtenido.
Asturian Language & Literature	*B2.C4.E1. Lee por iniciativa propia textos que más se adapten a sus gustos personales.*
Asturian Culture	*B1.C2.E3. Manifiesta autonomía en la planificación y ejecución de acciones y tareas y tiene iniciativa en la toma de decisiones.* *B4.C3.E2. Demuestra un espíritu emprendedor en la realización de actividades culturales*

Figure 9 - Sense of Initiative & Entrepreneurship Competence Profile - Primary Education