Specificities of Teacher Education in the fields of Arts and Humanities

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ABSTRACT:

Should teacher education take subject specificity into account? This is the starting point for our reflection. Should an Art teacher or a Humanities teacher undergo exactly the same educational programme as a Natural or Exact Science teacher? Or instead, should there be any differentiating elements in teacher education? If so, to what extent?

Underlying this issue, there is all the debate on the generality or specificity of knowledge development and production. Are knowledge development and knowledge production general and independent of the fields where they occur, as is the case of great Renaissance creators who were "brilliant" both in science and in arts (Martindale, 1989)? Or is it knowledge isolated in multiple fields as defended by authors like Gardner (1988)? Or, instead, is domain-specific knowledge production a mere form of expression in a unique process of development, which should be taken into account in teacher education?

The analysis of the arguments in favour of a domain-specific educational provision, which were advanced by 46 teachers of Arts and Humanities who had attended the Faculty's In-service Teacher Education Programme, allows us to admit the need to take into account the specificity of these particular knowledge domains, namely their aesthetic, critical and creative features. These teachers unanimously declared that teacher education should be specific, not only for didactic reasons, but also for theoretical and meta--theoretical grounds related to the nature of the subjects they teach and to the difficulty of implementation of concrete curriculum contents. These answers seem to be in tune with Boorstin and Pelikan (1981) when they assume that there are domain-specific differences in knowledge development and production which should be taken into account in teacher education programmes if knowledge development and production is to be achieved as its overriding goal.

KEYWORDS:

Teacher Education, Art Education, Critical Thinking, Aesthetic Development.

THREE TEACHER
EDUCATION PARADIGMS

Today's political, social and cultural context assigns teacher education a major role in the development of competences required to tackle multiple and rapid changes occurring in the world of education (van Huizen *et al.*, 2005). However, in meta-theoretical, theoretical and practical terms, teacher education has been blamed for lack of explicitation (Ginsburg & Clift, 1990) and integration of its grounding paradigms (e.g. Yarger *et al.*, 1977), and for merely absorbing some elements of current paradigms, even if they are (or seem to be) incompatible from a theoretical point of view (Clark & McNergney, 1990).

According to van Huizen *et al.* (2005), teacher education has been traditionally valuing one of the following three theoretical paradigms: focus on teacher competences, focus on teachers as individuals and focus on reflection and questioning. Competence-based teacher education is rooted in teaching impersonal patterns and expresses the objectives of teaching practice and the assessment criteria to be adopted. According to this paradigm, teachers are supposed to be prepared for daily effective performance in classroom context, regardless of educational values and aims (e.g. Elam, 1971). The metaphor that best describes this paradigm is that of equipping. In this sense, teachers should have a whole set of competences and strategies at their disposal which they are supposed to apply properly according to concrete situations and contexts.

On the other hand, teacher education focused on teachers' personal dimension takes their individuality as its major tool, since the teaching process implies permanent adjustment between professional and personal dimensions (e.g. Combs, 1965; Fuller, 1969). In this sense, teacher education should focus on the development of teachers' personal dimension, namely the construction of an integrated personal and professional identity (e.g. Nias, 1987), which according to some theorists can be achieved by the construction of narratives where the emerging symbolic elements enable the characterization of teachers' subjective processes and further re-organization, thus opening up to new possibilities (e.g. Nóvoa, 1992). As stated by Polkinghorne (1988), personal identity is built through a personal narrative configuration leading to a better understanding of one's existence as a whole and as an expression of a unique story in constant development. According to Phinney (2000), there is a universal need for people to define themselves by reference to their context of development, from early identifications, which are characteristic of childhood, to a more internalised personal understanding in adult life. Cultural studies have always relied on narratives as a tool to improve understanding and sense making (Bruner, 1990). However, the use of autobiographic narratives has some limitations, since life narratives tend to be close to the official model of the self, only varying both in form and in content according to the quality and social context where it occurs (Bourdieu, 1996). Moreover, teacher identity

building implies not only personal and professional development but also institutional development, which means these dimensions should be taken into account in teacher education (Nóvoa, 1992).

A third paradigm emerged as an alternative to the previous ones: teacher education based on reflection and questioning. The key idea in this approach is the construction and re-construction of professional repertoires all along teachers' practice through constant evaluation, reflection, and questioning, since teachers are simultaneously researchers and reflective practitioners (Stenhouse, 1975). This way, the adoption of an investigative attitude towards one's own practice would lead to critical reflection. This paradigm is grounded on learning and development perspectives which privilege creative and critical thinking. According to Vygotsky (1978), for instance, each individual is a flexible inventor of his/her personal future and potentially contributes to the future of his/her culture. Piaget (1988) also argued that the major aim of education should be creating individuals capable of doing new things and not merely repeating what previous generations had done before. Piaget (1988) used the terms creativity, invention and discovery to highlight the need for the development of critical minds capable of exceeding passive acceptance of what is offered by their environment. In this sense, teacher education should be an opportunity for critical reflection, questioning, and critical production of new or extended personal approaches, which might enable teachers to adapt to ongoing changes in the educational field.

Traditionally valued paradigms can, of course, contain enriching features for the teachers since each one of them focuses on a different and relevant component of the teaching activity. The abovementioned three paradigms are rooted in different learning and development perspectives and value teacher's internalisation of different tools: equipment to make learning easier, capacity of self-support, and capacity of reflection. However, if any of these features is isolated or excessively overvalued, there is risk of excessive concentration on a single characteristic (van Huizen *et al.*, 2005), thus neglecting other important features in the educational process and therefore getting little or no impact at all on the teaching practice (van Huizen *et al.*, 2005).

NEW TEACHER EDUCATION PARADIGMS

Although the possibility of conciliation among these three classical paradigms seems to be questionable since they come from different epistemological bases, the trend to look at natural and cultural phenomena from a systemic perspective inherited from cybernetics can open up to paradigm integration and eclecticism, which can be a form of overcoming such difficulty of conciliation.

The systemic perspective is based on the idea that the whole is more than the sum of its parts, the idea that all systems possess integrated and inter--related subsystems and the idea of circularity, that is, that all components influence one another (Schaffer, 1996). In this sense, the training focus is no longer the trainer but the trainee, who is seen as an active agent of his/her own education through a permanent construction and reconstruction of knowledge involved in the teaching process. Therefore, the perspectives and representations trainees possess when they start any educational programme serve as a basis for the construction of knowledge, namely for the internalisation of concepts and reconfiguration of current schemes, attitudes or beliefs, that is, assimilation and accommodation as defended by the equilibration theory (e.g. Piaget, 1971).

Valuing the process of teacher professional and personal construction as whole and valuing its complexity implies valuing the desired active and involving transformation of information not only into knowledge but also into feeling, thus stressing its affective dimension, regarded as inseparable from the cognitive dimension. Apart from the debate on the primacy of the cognitive dimension over the affective dimension, the fact is there is mutual correspondence between them and they can influence each other. (e.g. Piaget, 1962). Consequently, as far as teacher education is concerned, it is not enough to acquire some skills and learn how to use them and how to apply them adequately as defended by the skill-based paradigm. Knowledge and skills must be integrated in the "self" in order to develop know-how, capacity to act and know how to be in a way to effectively mobilize them according to each specific context and to the problems to be solved.

The idea of circularity among the multiple components of knowledge is patent in Freire's notion of dialogue (e.g. Freire, 1996), which leads to knowledge destructuring-restructuring. Circularity would then be present in the challenge teacher education should pose, through dialogue, on the teaching practice, particularly when tackling social and professional daily situations. Horizontal and expressive dialogue should lead to the construction of meaning as a person (Freire, 1980) and as a professional, we would add. On the other hand, the notion of circularity is also present in Wittgenstein's theory (1966), since concepts are seen as mutually referenceable circumstances constructed through personal investigation on the multiple levels of daily symbolic systems, including structuring language. This way, the process of knowledge construction would be intrinsically linked to the immediate circumstances of the educational process which is to do with the notion of context as highlighted by Vygotsky (e.g. 1978).

According to van Huizen et al. (2005), Vygostkian theory could be an alternative paradigm for teacher education. His focus on context could lead to integration of the different dimensions valued by the classical paradigm, therefore overcoming the limits of an exclusive focalisation in a single paradigm. The concept underlying socio-cultural theory is "scaffolding", which was created by Wood, Bruner and Ross (1976) to describe the tutorial interaction inherent to person-environment interaction and suggests the idea of "support-to-reach-further" (Lourenço, 2005). In this sense, teacher education would be a scaffolding process built through interaction, guided co-questioning and reflective research, which would lead to knowledge restructuring and to the construction of new knowledge.

New teacher education paradigms emerge from belief that teaching and learning processes always occur in specific contexts and are affected by their surrounding circumstances. At a time when the teaching activity seems to be increasingly characterized by uncertainty, teacher education must provide the tools teachers need to be able to tackle the unpredictability and ambiguity that drives from uncertainty (Edwards et al., 2002). Among these tools, there is experiential learning and meaningful evaluation (e.g. Wood, 2000), learning through social and cultural participation (e.g. Ten Dam & Blom,

2006), collaborative strategies (e.g. Edwards et al., 2002) and scaffolding (van Huizen et al., 2005). To what extent are these tools equally necessary for all teaching subjects? Are there any subjects where the use of such tools could be more relevant?

GENERALITY *VERSUS* DOMAIN-SPECIFICITY

Formal education, and consequently the preparation of people working in this field, privilege four major educational pillars, which according to Delors (1996) are centred on knowledge, know-how, know how to interact and know how to be. Educational guidelines set out at world, national or local levels are frequently targeted at ensuring and deepening humanistic, artistic, scientific and technological culture, and developing expression and communication skills and ethic and aesthetic sensitivity. As a last resource, formal education contexts assure the preparation of future guardians of Human natural and cultural legacy through meme transfer to the next generation (Dawkins, 1976). In theory, subject matters conveying scientific, technological and artistic knowledge constitute the knowledge items of natural and cultural heritage. In this sense, it could be argued that the preparation of teachers who transmit such knowledge to forecoming generations would not necessarily have to consider possible differences in terms of domain-specific knowledge. However, the scientific revolution which started at the end of the 16th century resulted in a divorce between Science and Art (Jardine, 1999), or in Snow's assertion (1959), between the culture of Art and Human Sciences and the culture of Exact Sciences. Before the disadvantages posed by overspecialisation, although authors like Adams (1907, 1918), Snow (1959) and Popper (1978) have argued in favour of an integrative perspective of knowledge thus valuing the access to the third culture (Snow, 1959) or to ideas world 3 (Popper, 1978), according to the socio-cultural and systemic paradigm such access to an integrative world seems to require content-specific awareness particularly in the field of teacher education. This idea gains new relevance when considering research studies showing that teachers' implicit representations on knowl-

edge development and production vary according to their domain-specific specialization (e. g. Sternberg, 1985). This idea becomes even more plausible when analysing the characteristics of both scientific and artistic knowledge.

The debate on domain-specificity versus generality in the field of teacher education necessarily implies having taken a stand in the theoretical debate on the specificity or generality of knowledge development and production in the field of creativity. Is creativity a general field-independent process as shown by Martindale (1989) in the case of several Illuminist creators who made their way across the pathways of science and arts simultaneously? Or is it a set of multiple domains as argued by some authors like Vernon (1989) who describes the taxonomy of social, scientific and artistic creativity or like Gardner (1988) who defends that creative production in a specific domain depends on the types of intelligence? The key to this debate might be the distinction between process and product (Sternberg, 2001). Regarding knowledge development and production as a process means emphasising not only the way internalised information is organised and mobilized but also the multiple neuronal connexions possible among knowledge items from different domains (e.g. Martindale, 1989), which suggests the idea of a general creative process with expression in multiple domains (Sternberg, 2001). However, as stated by Boorstin & Pelikan (1981), research should go deeper into the differences between the creative patterns of Art and Science, not meerly to explain them but also to suggest forms of promotion.

One of the fields where research has confirmed the existence of differences between the artistic and the scientific domains is the field of teachers' definitions and beliefs about creativity. Sternberg (1985) came to the conclusion that teachers' implicit theories about creativity vary according to their knowledge affinities. While Art teachers value imagination and originality, profusion of ideas and openness to new ideas as creativity-determining features, teachers of philosophy choose different features such as the capacity to imaginatively handle notions and combinations of ideas and the creation of knowledge classifications and systematisations in a way to challenge the conventional ones. On the other hand,

Physics teachers point out different features such as invention, the capacity to find order in chaos, and the capacity to put basic principles into question, whereas Management teachers would rather explain creativity as the capacity to find out and explore new and profitable ideas.

In this sense, three surveys carried out in the Faculty of Psychology and Educational Sciences of the University of Lisbon (FPCE/UL) evidenced the existence of differences among subject teachers working in several schools of the district of Lisbon. These studies were undertaken in the context of the Integration Activities module of an in-service professional qualification programme, which included teachers of Arts, Modern Languages and Literatures, Philosophy, History and Geography. Though they followed different objectives, all of them showed that Art teachers and Humanities teachers value different dimensions of expression and show different perspectives. In a study involving 30 other teachers, Jacob, Viana, Silva, Pichel and Domingues (2000) analysed the descriptions of twelve faces produced by famous painters and sculptors and noticed that Science teachers and teachers of Economy use concrete adjectives to describe them in a literal way, while Humanities teachers use more abstract and subjective descriptions and Art teachers qualify these faces in a way which resembles the descriptions made by the artists who created them. A similar trend was evidenced in another study aiming at clarifying the importance of images in formal education. In this case, although 103 teachers have recognised the relevance of image, this study showed that not all of them take the most of it nor do they explore its multiple potentialities (Matias, Senra, Carrola, Tomé, Sequeira & Pereira, 2002). Only Art and Humanities teachers can describe an image in a non-stereotyped way, being able to extract more information than teachers from other knowledge domains. In the same sense, belief that only a few are gifted for drawing distinguishes 25 teachers of Science and Economy from 15 teachers of Arts and Humanities who do not believe in the power of the drawing-gift myth in such a persuaded and deterministic way. Here again, only Arts and Humanities teachers consider the possibility of learning and improving this type of expression (Moreno, Simões, Pinto, Godinho & Neves, 2005).

Differences among teachers from the various knowledge domains are not restricted to implicit theories, beliefs, attitudes or opinions. There are also differences related to the goals of the subjects they teach. Though recognizing there is a lot in common in multiple knowledge expressions, the fact is curriculum objectives proposed for scientific and technological subjects differ in some aspects from the objectives proposed for artistic and humanistic subjects, since they comprise different worldviews, some valuing the natural world while others value the cultural world, some looking for objectivity while others look for subjectivity, some trying to get deciphering while others try to reach encryption. On learning scientific knowledge patterns the key elements are logics and internalisation of the general laws of nature obtained and tested through the scientific method. On learning the patterns of cultural and artistic knowledge the focus shifts to aesthetics and the expression of ideas and emotions. As stated by Leontiev (2007), Art conveys personal meanings and deeply impacts on human personality since it possesses the capacity to reveal, express, and communicate one's personal sense of reality.

Having these data as a basis, the Vygostkian teacher education paradigm proposed by van Huizen *et al.* (2005) defends that the subject-specific context should be taken into account in scaffolding processes both for teachers and for pupils. Similarly, from the point of view of competence-based paradigms, the tools to be used would also differ according to more or less value attributed either to logic or to expressivities. Teacher identity building would also be viewed from different perspectives according to their specialization areas, since they claim different heritages. Therefore, critical reflection on teacher activity and professional practice would inevitably vary accordingly.

Presuming that knowledge development and production can assume different forms of expression and should therefore be taken into account in teacher education programmes, we tried to collect the opinions of Arts and Humanities teachers about domain specificity in teacher education.

OPINIONS OF ARTS AND HUMANITIES TEACHERS

Forty-six written opinions have been collected from professionally certified teachers who had completed the in-service teacher qualification programme of the FPCE/UL in different school years. This programme is targeted at teachers who are already working as teachers but whose academic qualifications do not give direct access to the teaching career (in the case of Arts) and at those who have had to change their professional itinerary for unexpected reasons (in the case of Humanities). This opportunity sample consisted of 14 female teachers and 17 male teachers who took a degree in Architecture or Plastic Arts (Painting, Sculpture, Drawing) and Design, and 15 female teachers and 10 male teachers of Modern or Classic Languages and Literatures, History or Geography, all of them teaching in the third cycle of Basic Education in public or private schools of the District of Lisbon.

The objective of this survey was to find out what Arts and Humanities teachers thought should be the core elements of their teacher education. Therefore, teachers were asked to give their opinion on the need for subject-specific preparation in their respective area of knowledge. In case of an affirmative answer, they were asked to write down the specific aspects they though should be present in Art or Humanities teacher education. Three broad categories emerged from content analysis of the answers obtained: aesthetics, critical thinking and creative expression.

The category "Aesthetics" includes answers defending that Arts and Humanities teachers should learn "to contribute to the fruition and production of cultural goods" (Humanities teacher). Among the multiple forms of aesthetic valuation the following can be highlighted: "to love all forms of Art in general" (Humanities teacher), "to learn how to inspire the others" (Art teacher), and "to learn how to transmit knowledge and emotions and how to love life and one's pupils" (Art teacher). Answers like "learning to endeavour to find the essence of one's art" (Humanities teacher) or "showing the value of the subjects being taught" (Art teacher) have also been included in this category. In more concrete terms respondents also mentioned some strategies,

such as "stimulating the pleasure of reading (Humanities teacher) "by sharing texts, readings, opinions, feelings" (Humanities teacher), or being able "to interact with the Work, exchange arguments, get angry, hate it, and then rest, exhausted, dazzled by its beauty and superiority" (Art teacher). The notion that Arts and Humanities teachers "should learn to make pupils aware that Arts and Humanities can also be learnt" and that teachers should teach these knowledge domains, which at least deserve an effort to capture their essence" (Humanities teacher) has also been pointed out as a specific objective of teacher education in these fields. The value of the aesthetical dimension of education has been mentioned 14 times by 31 Art teachers and 9 times by 15 Humanities teachers.

The category "Critical thinking" comprises the answers that highlight teachers' need "to improve their own critical thinking", "rejection of formatted knowledge" (Art teacher), and "learning subversion" (Art teacher). Every teacher, either of Arts or Humanities, should "learn to criticise through forgetting his/her own itinerary and looking at the others' for reference" (Art teacher). They should also "learn to decontextualise" (Humanities teacher), "to instil the spirit of analysis and critical thinking" (Humanities teacher) and "to inspire pupils' desire for eternal unrest" (Humanities teacher). Teacher education should also lead teachers "to learn to be curious and lead to discovery" (Humanities teacher). Specific strategies proposed for this category include "learning to capture the way each pupil looks at his or her surrounding world and accordingly guide him or her in the process of discovery and appropriation of new horizons, by relying on tools capable of structuring their reading and analysis of facts and processes" (Humanities teacher), "learning to understand the pupil behind his or her work and to reverse such positions" (Art teacher), and finally "learn to be born again everyday (that is, always being predisposed to look around with new eyes and new ways of looking, never giving up one's wish to learn)" (Art teacher). In this category we have also included answers pleading for transdisciplinarity: "one should learn the history of his or her own Arts and, whenever possible (most preferably), the history of other arts as well" (Humanities teacher). Among the specificities of Arts teaching-group, one

of the respondents mentioned the need to "learn how to properly manage the exiguous time assigned to the subject(s) they have to teach", whereas another elected as a priority the need "to learn how to achieve quality within diversity", to which other teachers added "learning to deal with the countless and diversified subjects one can be charged with", or "learning to be polyvalent". The field of Arts includes subjects of a more technical nature (Descriptive Geometry), subjects of a "more artistic" nature (Drawing, Arts workshop, etc.) and subjects of theoretical nature (History of Culture and Arts)". The idea of polyvalence is also expressed in the assertion that teachers, both of Arts and Humanities, should learn that "culture is neither visual nor merely literary" (Art teacher) and besides they should also learn "to interact with their colleagues in an interdisciplinary way" (Art teacher). "Every Art teacher, and not only Art teachers, should be aware that there is no such thing as two equal lessons", as expressed by one of the members of this group. The importance of the critical dimension of teacher education has been mentioned 12 times by the 31 Art teachers and 7 times by the 15 Humanities teachers.

The last category of answers focus on the creative dimension of Humanistic and artistic subjects. Creativity is a product of the self, of the process, and of the surrounding context (e.g. Csikzentmihalyi, 1988) and it includes genesis and exploration of ideas (Finke *et al.*, 1992) and respective communication (e.g. Sternberg & Lubart, 1996). Considering the multiplicity of dimensions involved, the category "Creativity" includes answers related to teachers' and pupils' creative features, to the development of the creative process, comprising processes of observation and genesis of ideas, and finally to the construction of creative products and respective expression. As for the personal characteristics of teachers, respondents highlighted teachers' need to "learn about the essence of human beings as creative agents" (Humanities teacher) and, of course, the need to "learn to be more creative" (Arts teacher). The answers reflecting belief that teacher education should take the creative process into account started by identifying the following objectives: "learning how to see" (Art teacher) and "observing everything around us, observing all stimuli and referents" (Art teacher). The other answers concerned

with the process focused on the attention to be paid to "higher-level use of language" (Art teacher) and "to awareness that no pupil can be blamed for his or her incapacity to write (or draw) as well as his or her teacher" (Humanities teacher).

Creative production was present in answers claiming that Arts and Humanities teachers should learn "to be hands-on, drawing, and painting words" (Humanities teacher) or "drama techniques" (Art teacher). In this category we have also included the answers that expressed the need "to stimulate creativity" (Art teacher), "to educate for creativity (promoting pupils' creativity), not only in the plastic domain but also through creative strategies in other domains" (Art teacher) and, finally, the need to "realize that creativity assumes different forms and that it is inexhaustible" (Humanities teacher). While Art teachers should "learn to be receptive to be able to receive more than give", Humanities teachers should "learn not to pay too much attention to commas (so often optional) but rather concentrate on Words". Another dimension valued was teachers' as well as pupils' expressiveness. "Every Arts or Humanities teacher should learn to communicate his or her feelings" (Art teacher). The importance of the creative dimension of teacher education has been mentioned 16 times by the 31 Art teachers and 8 times by the 15 Humanities teachers.

CONCLUDING REMARKS

Even in the absence of comparison with data from other domains, the arguments presented by the interviewed teachers have value *per se,* since they reflect the representations of different subject teachers on the specificities of the subjects they teach and the dimensions they think should be included in teacher education. Aesthetics, critical thinking and creativity emerge as intrinsic to subject areas linked to Arts and Humanities and lead to the flexibility required from thinkers and teachers as a way to tackle today's growing diversity and to change their attitude towards the *status quo* (Hargreaves & Fullan, 1998).

From a Vygotskian point of view (van Huizen *et al.*, 2005), the specific context where the educational process occurs must be taken into account in teacher education. To achieve this, one possible way is to understand which knowledge domains make children aware of their natural patrimony. Therefore, scaffolding through interaction, guided co-questioning and reflective practice as core elements of teacher education should be rooted in the particular features of the knowledge domain being taught.

From a systemic point of view, teachers should be trained in multiple dimensions whose circular dynamics unveils, expresses and communicates the personal sense of reality (Leontiev, 2007). Though the possibility of conciliation of classic paradigms is questionable, the trend to look at the different natural and cultural phenomena from a systemic perspective, opens up to paradigm integration and eclecticism, which can be a form of overcoming such difficulty of conciliation. In this sense, the integration of the different dimensions of cultural heritage would allow for the construction of personal meanings with high impact on human personality.

In present cultural, social and political context, one possible way to achieve a solid reference framework capable of integrating multiple components of current and emerging teacher education paradigms can stem from consideration of domain-specific knowledge simultaneously aiming at deciphering and encryption.

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