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Curriculum in higher education research

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During the last decade, curriculum has received increasing attention in higher education (HE). The implementation of the Bologna Process affected university curricula around Europe, and globally there have been some major curriculum transformations (Blackmore and Kandiko 2012). In 2005, Barnett and Coate proposed that curriculum should be one of the key concepts in discourse on HE. They introduced an idea of curriculum as engagement, where the cornerstone of university study is the student's process of coming to know. It is through curriculum that the core of the discipline is put into practice. Thus there are huge expectations of curriculum in regard to students' learning, universities and society, and it is recognised as one of the most notable means of having influence on HE, both educationally and politically.

Being an important concept, we are interested in how curriculum has been approached in HE research during the last ten years. In this systematic literature review we present a comprehensive and critical view of the state of studies on curriculum in HE. Our aim is twofold: first, to deepen the understanding of the wide array – and disarray – of studies on curriculum; and, second, to discuss the different conceptualisations of curriculum. On the basis of the concepts arising from curriculum studies, we develop an analytical framework to identify the curriculum conceptions and ideas in the reviewed articles.

Approaching the curriculum in curriculum studies

Generally speaking, the term 'curriculum' refers to a variety of things. In curriculum studies, the moral, political and ideological aims behind the various conceptualisations of curriculum have been studied for decades (e.g. Grundy 1987; Kelly 2009/1977; Stenhouse 1975; Pinar *et al.* 1995; Pinar 2004). In this research tradition, *syllabus*, *product*, *process* and *praxis* are frequently used concepts. These four approaches characterise the various meanings of curriculum, including the distinct conceptions of knowledge and learning, the roles and positions of actors and the reasoning behind the overall purpose of curriculum. Accordingly, they offer a basic framework to examine the features of the curricula in our data.

In the *syllabus* approach to curriculum, the focus is on the content or body of knowledge that is to be transmitted, or subjects to be taught, or both (Kelly 2009/1977). The decisions on content come first, whereas the nature and implementation of a total programme is not considered so important. Every curriculum includes a syllabus, but on its own it is a limited approach to curriculum. According to Kelly, understanding curriculum as a syllabus is likely to hamper rather than assist curriculum change or development because it tends to proceed in a piecemeal way within subjects, rather than according to any overall rationale (Kelly 2009/1977). However, degree requirements, including a list of topics and books, is one way of seeing curriculum as a syllabus in contemporary HE (Coate 2009).

The notion of *product* in the curriculum stems from the work of Ralph Tyler (1949). Tyler's rationale had four main principles: (1) defining learning objectives (goals), (2) introducing useful learning experiences (content), (3) organising experiences to maximise their effect (teaching methods) and (4) evaluating the process and revising the areas that were not effective (assessment) (Tyler 1949). These principles can still be found in curricula from primary to tertiary level education. However, Tyler's rationale has been criticised because of its narrow, mechanistic and end-product-like view of education (e.g. McKernan 2008). The rationale is based on Bobbit's (1972/1918) idea that curriculum was a way to inculcate into students such knowledge, skills and beliefs as were deemed to be of service to them in an urban, industrialising and constantly diversifying society. These objectives are not far from the contemporary European higher education modernisation agenda, which stresses the EU's need for more highly skilled, competent and innovative people in order to respond to global competition (European Commission 2011).

As an alternative, curriculum has been approached as an interactive *process*. It includes the written curriculum as a negotiated artefact, its implementation in teaching–learning processes and the student's autobiographical experience and learning engagement (see Pinar *et al.* 1995; Stenhouse 1975). The process approach may emphasise different aspects: (1) process of negotiating the fundamental ideas and aims of the curriculum, (2) process of the planned, implemented and learned curriculum, (3) cumulative learning cycles within the curriculum and (4) process of developing the curriculum on the basis of the experiences of teachers, students and other interested parties. This is why curriculum has also been viewed as a 'complicated conversation' (Pinar 2004: 185–7).

Curriculum as *praxis* is a development of the process approach, with the emphasis on informed, committed and emancipatory action (Grundy 1987). It requires a constant evaluation of what is valuable and what needs to be changed and why. It develops through a dynamic interaction between action and reflection. According to this idea, curriculum conciliates and selects the issues to be solved through educational practices. Climate change, political activism, economic growth and technological innovations are examples of such issues in HE.

As these different approaches indicate, curriculum cannot be fully understood outside the personal, institutional or societal power relations that reflect a certain historical context. Hence, we can see that the ways of understanding the idea of curriculum reflect what kind of knowledge, dispositions, learning conceptions and qualities are valued in HE.

Data and methods

In order to find relevant articles for this review we chose a database that focuses on studies on HE. Research into Higher Education Abstracts (RHEA), published by TandF Informa UK Ltd on behalf of the Society for Research into Higher Education (SRHE), provides a regular survey of international periodicals relevant to the theory and practice of HE. It has been published since 1967 and focuses on journal articles published in Europe and the British Commonwealth area. The search for 'curriculum' as a keyword yielded 4,279 hits. This indicates the role of curriculum in HE research, showing that it is a widely used concept for various purposes.

In outlining the data we used the following search criteria: the article must have been published during the last ten years (2004–2013) and the concept 'curriculum' should have appeared both in the title and among the keywords. This was because we wanted to make sure that curriculum was considered an important and central concept in all the selected

articles. The search based on these criteria yielded sixty-four articles, and, after rechecking the results, we ended up with sixty-two articles for detailed analysis.

The current study can be described as a systematic review. However, rather than conducting a general systematic review (e.g. Kyndt and Baert 2013), in which we gathered as much knowledge as possible on curriculum, we were interested in finding out how it had been approached and conceptualised. We are aware that we have missed books, chapters and articles that are not indexed in the chosen database but are doubtless important contributions to the HE curriculum debate. However, examining the selected articles gives us an adequate picture of the variety of curriculum studies in HE and provides enough background and credibility for our argumentation.

The selected sixty-two articles were systematically examined, sorting out the following information: journal, year, disciplinary context, national/international context, level of approach (programme, local, national, global), key references, aim of the study, methodology, key results and suggestions. In addition, attention was devoted to ideas and understanding of and around the notion of curriculum. In other words, we studied how ‘curriculum’ was defined and/or approached. In some cases, this meant focusing on semantic minutiae, but generally we were looking for a bigger schema.

To start off the analysis of the articles we used the four approaches, *syllabus*, *product*, *process* and *praxis*, as references in order to see and construct the emerging conceptualisations of curriculum. However, early impressions convinced us that categorising the articles into four sections was scarcely possible, nor would it do justice to the data. Many of the factors identified to reflect curriculum thinking indicated not just one curriculum approach, but several.

To find another perspective on the data we began to look for themes that would help us to identify the key differences between the concepts that originally connected the articles to the four approaches. We found that, although the articles used similar vocabulary, they differed especially in their orientation to *knowledge* and *ownership*.

In discussions of knowledge, at one end of the spectrum there were research-based attempts to define the inalienable contents of a curriculum. Here, knowledge consisted of static content and skills to be transmitted. At the other end, knowledge was characterised as a dynamic entity, challenging students’ epistemic development. In this case, knowledge was seen more like critical reflection (e.g. Mezirow 1998), learning and understanding of the knowledge practices appropriate to the discipline and encouraging students to develop themselves towards creating knowledge.

By ownership, we refer to the power relations and agency behind the curriculum thinking that emerged from the data. Again, there were divergent views. On the one hand, curriculum was approached as a way to control the students’ learning outcomes. The control arose from the interests of the university or the world outside, but there was little room for ownership by the student. However, on the other hand, widening agency and student participation in defining knowledge in the curriculum and various potentials of development were emphasised. Accordingly, knowledge and ownership appeared as two cross-sectional themes that helped us to develop an analytical framework with two dimensions (Figure 10.1).

In relation to the dimensions of knowledge and ownership, this framework was used as an analytical tool to position the implicit approaches emerging from the articles or explicitly discussed, and thereby to illustrate the various conceptualisations of curriculum in HE studies. This recategorisation allowed us to widen the approaches of *syllabus*, *product*,

process and *praxis* and use them as a heuristic tool, connecting curriculum forms and practices to a more theoretical understanding of the nature of teaching, learning, power relations and roles of the different actors.

In the following sections, we first report general notions about the state of curriculum research in HE and then move on to discuss the conceptualisations. In order to make our argumentation explicit, we use some views from the articles as examples. It is important to note that one article could often be discussed in the context of more than one approach.

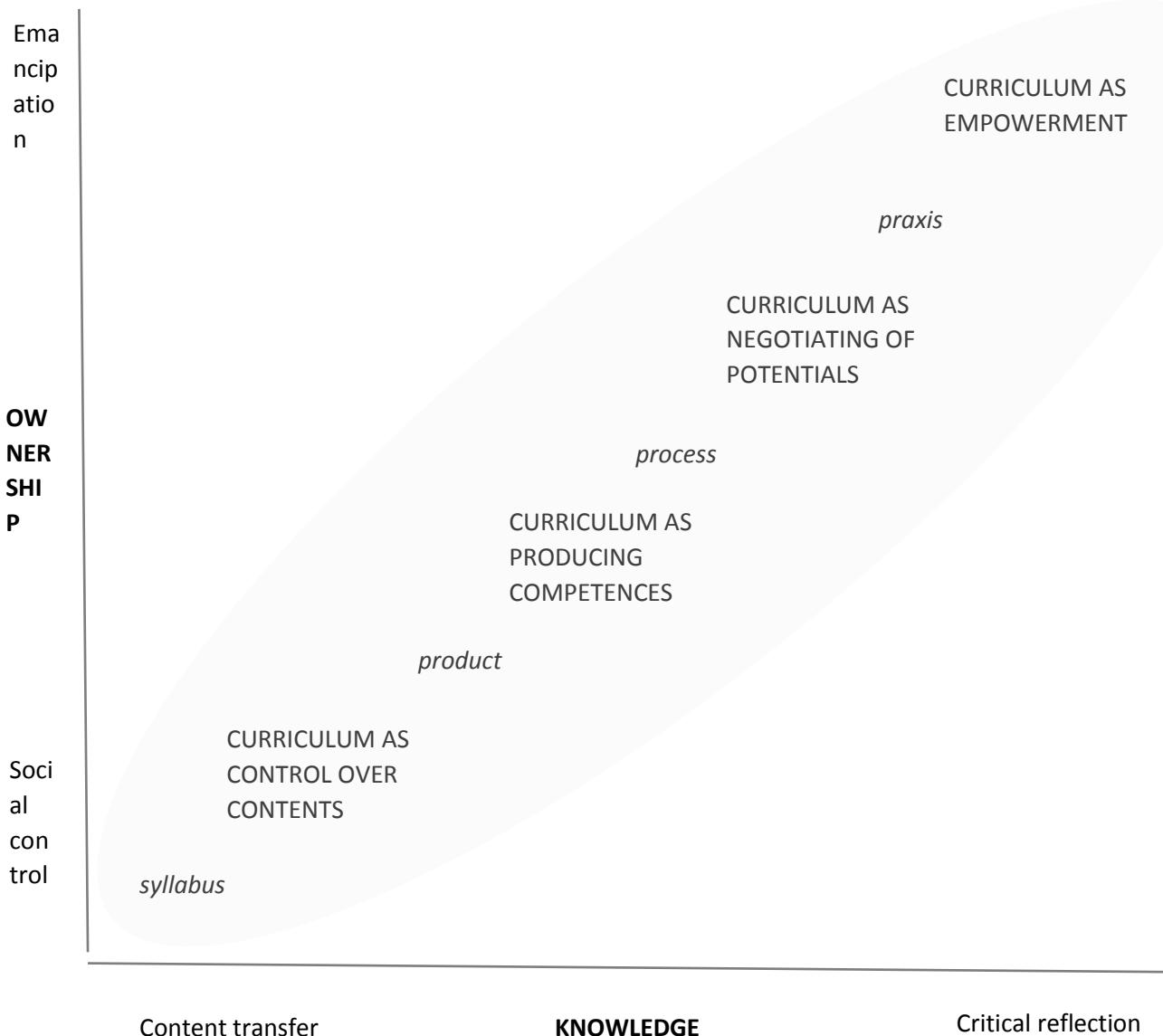


Figure 10.1. Framework for conceptualising curriculum approaches

An overview of studies on curriculum

The overall impression gained from reading the selected sixty-two articles is that curriculum is a widely used concept that does not have a shared meaning in HE research. Most of the articles took the concept of curriculum as self-evident, yet a wide variety of interpretations appeared. Curriculum was used synonymously with teaching (Ahern *et al.* 2012), programme (Alpay 2013), scheduled activities (Le Riche 2006) and course delivery (Armellini and Nie 2013). Most often, studies on curriculum focused on its development in a specific context.

Eight of the studies were conceptual or theoretical elaborations on curriculum or curriculum policy. Methodologically, the qualitative approaches (seventeen) and case studies (sixteen) were more common than the quantitative (eight) or multimethod (six) approaches. Six articles could not be categorised methodologically because they reported experiences or proposed directions for development without scientifically sound argumentation. The context of the studies varied from programme level to global level. Programme-level examination was most frequent (thirty-six) and national perspectives (twelve) were more common than international (five). As expected, a European (forty-nine) context for the study was dominant. However, Australia (nine) and South Africa (seven) offered noticeable contributions, and altogether twenty-seven studies had either a non-European context or authors.

Only a few articles focused on explicit definitions of curriculum. Clegg's (2011) and Fraser and Bosanquet's (2006) articles problematised the conception of curriculum in the HE context. Clegg (2011) began with reflections on curriculum as a missing term, and underlined differences between curriculum and (utilitarian) pedagogy. Fraser and Bosanquet (2006) examined the different meanings given to curriculum in HE, their research being underpinned by literature from HE and curriculum studies. Furthermore, referring to Habermas's theory of knowledge-constitutive interests, they finally conceptualised curriculum as a product or a process serving technical, practical or emancipatory interests. These two studies were the rare ones that received cross-references from the other studies in this data. This indicates that there is not much cumulative research or discussion of the conceptualisation of curriculum in HE. Instead, there were some efforts to create new conceptualisations, such as a 'whole curriculum' approach that integrated content, pedagogy and assessment, and also political and global perspectives by Vidovich *et al.* (2012).

The sixty-two studies were published in thirty-one different educational journals. Two-thirds of the articles had a discipline-specific or local approach to curriculum. In only seven articles did the conceptualisation of curriculum rely on the literature on curriculum studies. Among the disciplinary fields, medicine (eleven), engineering (six) and health sciences (five) were the most frequently represented. Different disciplines had separate authorities and approaches. The authority in medical education was Ronald M. Harden, who was cited in eight medical articles but not in any other disciplinary contexts. Harden developed a spiral curriculum model (Harden and Stamper 1999) and later proposed the SPICES model composed of the following curriculum characteristics: student-centred, problem-based, integrated, community-orientated, elective-driven and systematic (Harden *et al.* 1984).

Sociologist Basil Bernstein's theories were used in ten articles in the context of, for example, engineering (Garraway 2010) and sociology (Luckett 2009), and especially by South African authors. Bernstein defines curriculum as 'what counts as valid knowledge' (Bernstein 1975). This definition highlights three features when thinking about curriculum. First, it puts knowledge at the centre of conceptualisations of curricula. Second, the notion of 'what counts' is a reminder that curricula are constituted by a set of choices. Bernstein (2000) summarises these as choices about selection (the content of the curriculum), sequencing

(what order/progression), pacing (how much time/credit) and evaluation (what counts for assessment). Third, Bernstein is clear that these curriculum choices are constituted by a set of underlying principles that legitimate certain curriculum choices and practices and not others, what Bernstein refers to as ‘recontextualising rules’.

Few articles crossed disciplinary borders: Gleeson (2013) discussed curriculum from the European perspective, concentrating on the Bologna and ECTS systems not only from the education policy perspective but also in the light of the curriculum theories put forward by Tyler and Stenhouse. Morcke and Eika (2009) applied the ideas presented by Harden, but also relied on Fraser and Bosanquet (2006) and Tyler (1949) when studying curriculum design in a medical faculty. However, neither these or other authorities nor the context predicted a certain conceptualisation of curriculum. For example, even if the Bernsteinian approach or PBL medical curriculum was used as a theoretical framework, the study could as well reflect *syllabus*, *product*, *process* or *praxis* curriculum thinking. In the next sections, we elaborate the conceptualisations that emerged more closely.

Curriculum as control over content

In the present data, one of the categories was how knowledge was conceptualised as content. In these approaches, curriculum was seen as the valuable content that should be transmitted to future generations. Ownership rested with those who had the authority to manage and control content. However, there were also approaches in which the power relations over the canon of knowledge were critically elaborated.

Curriculum appeared as a series of initiatives to be included in the curriculum. There was a tendency to map the key knowledge and skills gaps in order to define the core curriculum, to update the programmes and to provide normative guidance for curriculum designers across the institutions. These emerged as a catalogue of skills, knowledge and competence. The research article by Hurlimann (2009) is one example of this view. Her aim was to identify the planning professionals' environmental knowledge and skills gaps concerning significant future challenges and the goals of sustainability. She conducted a study among planning professionals who were already in the field of work, and identified knowledge gaps surrounding the issues of climate change and water management, and skills gaps in critical thinking and independent inquiry. She suggested that there was a need for analysis of existing curricula and curriculum revision across programmes.

Efforts of the previous kind are characteristic of the professionally and interdisciplinary orientated programmes in which there is an obvious need to regenerate the curriculum in response to current challenges. Unlike the basic idea of syllabus, there is a tendency to cross traditional subject borders and borders between knowledge and skills. Thus, the main purpose of the curriculum is to give students possibilities for gaining the kinds of knowledge that optimally integrate the various disciplines in terms of dealing with increasingly complicated problems.

Several studies suggested embedding some valuable content into the curriculum for all the students. Such initiatives included generic skills (e.g. Robley *et al.* 2005), internationalisation (e.g. Clifford 2009), entrepreneurship (e.g. Penaluna and Penaluna 2009), sustainability (e.g. Junyent and Cell de Ciurana 2008) and inclusion (e.g. Chapman 2007/2008). Depending on perspective, these attempts could be interpreted as social control or social good.

The demand from education policy and society to push the nature and scope of knowledge towards the professional agenda was critically reflected in some of the studies. The trend to ‘regionalise’ social scientific knowledge (Stavrou 2009) and the nature of knowledge as

context-dependent or -independent was widely discussed (Kilpert and Shay 2013). Nevertheless, the core content requirements were typically adopted through a top-down approach on the part of professional experts, governing institutions or industry. For example, in the medical curriculum, the health care institutions internationally (e.g. World Health Organization, WHO) or nationally (e.g. government) were identified as holding a significant role in defining content (Craddock *et al.* 2013).

However, the canon of knowledge may remain stable for years, which is one way of ensuring ownership and control over content. As Shay (2011: 318) stated, ‘staff will resist making changes to these texts until absolutely necessary’. Luckett (2009: 451) studied knowledge structures and curriculum structures within sociology, noting that ‘the knowledge structure of the discipline [...] allows knower allegiances, interests and identities to “play” in the discursive gap, constructing units of curriculum that are in keeping with the positions, specialisations and identities of individual academics’. Thus conflicts and negotiations of ownership were not just between academy and the outside world; they also existed within the academy.

Selection and control over the curriculum content reflect personal, institutional, economic and policy interests, which emerged here as unidirectional enterprise. Studies focusing on the content knowledge defined by institutions, markets, academics or other experts too often seemed to take these for granted – as if it would result in a complete and independent curriculum. Kelly (2009/1977) describes this as reflecting the kind of absolutist epistemology and knowledge as being in a sense God-given, independent of the knower. Moreover, when conceptualising curriculum as content knowledge to be transmitted, there is a risk that agency and identity construction from the student’s perspective fully escape our attention.

Curriculum as producing competences

The implementation of curriculum as teaching and learning processes – what works and how to do it – shapes the research agenda. In this section, we describe in more detail the nature of the studies that focus on developing knowledge as competences and what kind of ownership can be identified here.

Curriculum and the goals of education were discussed with varied concepts, such as the terms of learning outcomes (e.g. Bolander *et al.* 2006), student performance (e.g. Gardner *et al.* 2005) and competence-based education (Edgren 2006). Elizondo-Montemayor *et al.* (2008) suggested that the focus should be on the selection of learning strategies that promote a student-centred approach to learning to achieve standards of competence. They also suggested changing the assessment system in favour of performance-based evaluation. Accordingly, the current needs were stated as the graduates’ and undergraduates’ ability to meet the demands of change. They appeared to be evolving the desired student outcomes, namely core curriculum standards to educate employees for the new era.

As the curricula needed to be job-relevant and flexible in order to integrate students into professional life, fundamental curriculum changes were made, based on the idea that certain curriculum models promote the achievement of intended goals better than others. For example, Peeraer *et al.* (2009) explored whether there was a difference in learning outcomes when studying medicine according to a curriculum based on Harden’s SPICES model or a traditional curriculum. However, Craddock *et al.* (2013) stated that, in practice, curriculum development did not necessarily rely on any educational theory, but rather was an issue of logistics and structures. Therefore, when curriculum focused on well-defined objectives supported by carefully planned teaching and assessment methods, it seemed to represent a variant of the product view of curriculum as put forward by Tyler and Bobbit. In fact, seven

of the studies referred to Biggs and his model of constructive alignment, which relies on Tyler's rationale. Through well-aligned phases in the curriculum and its implementation, the student achieves the intended learning objectives (Tyler 1949: 63).

Accordingly, young graduates should be prepared for evaluation of the standardised competence areas and gain a set of skills fit for the market. For example, in the engineering curriculum, the market seemed to play a notable part in setting goals to meet the needs of industry (Chen *et al.* 2005). From the students' perspective, the problem may be that the labour market appears to constantly create new preferred employee profiles and procedures for recruiting young people to the workforce. According to the literature reviewed, the tendency of recruiters is to 'play it safe', preferring the 'highest level' of graduate available. This may reduce the possibility of candidates being confronted with a task beyond their true capabilities, but at the risk of giving the young professional the feeling of being overqualified while lacking important 'soft skills', such as intra-company networks and financial know-how (e.g. Becker 2006).

In understanding curriculum, consideration of student learning gains appears to be a step forward, but there are some risks with this approach. First, a competence-based curriculum gives weight to evident changes in students' behaviour as results from carefully defined learning objectives, effective teaching, relevant learning experiences and equitable evaluation (cf. Tyler 1949). It marginalises students, curbing their role in decision making and their ownership of their learning and professional development. Second, the HE staff may be marginalised as well, and positioned solely as executors of the will of the leading experts who define the curriculum and its objectives. Third, as curricula are reformed in line with economic and societal requirements, the role of universities as the owners of the highest knowledge and the cradle of creation and innovation may decline. It is quite striking that, as the status of HE seem to be diminishing, the European Commission, for example, emphasises the HE institutions' role in strengthening the knowledge-intensive economy by ensuring excellence in research, education and training, as well as in cooperation with industry. Therefore, the universities too are regarded as producers of highly customisable products that try to carry out the ever-changing will of society and adapt to new economic and social conditions.

Curriculum as negotiating of potentials

In the reviewed articles the curriculum was approached as a negotiated artefact, even though it was not explicitly expressed in any specific process model of curriculum. Consequently, we identified processes concerning knowledge and knowing, processes that consolidated autonomy in the face of outside pressures on the university and processes that enable students' widening participation. Knowledge here was related to students' epistemic development and potentials. Ownership in these negotiations was shared.

The process of coming to know was the main focus in Barnett's (2009) article, which approached curriculum as a pedagogic vehicle for effecting changes in human beings through particular kinds of encounters with knowledge, but stressed that curricula and pedagogy have to be more than a matter of an encounter with knowledge. It is also a question of formation of epistemic dispositions and qualities. This has to do with the curriculum as approved by the university and as experienced by students. Barnett espoused the philosophical approach to curriculum that mediates the immediate, pedagogical relationship between the students and teachers. Knowledge in the curriculum has implications for students' *being* and the formation of epistemic virtues. These particular views resonate with the idea of the autobiographical

process curriculum, in which curriculum is understood as communication informed by academic knowledge, but characterised by personal educational experience (Pinar 2004).

Besides the focus on processes concerning the student, the programme-level process of planning was understood as the main basis of curriculum work. This view relies on the idea that the individual's or the group's learning processes can be steered through a coherent curriculum, but, contrary to the product view, it gives room for shared ownership in these processes. A significant feature in the studies was that thinking of curriculum as process may productively unite some contradictory approaches. One example is Fahey (2012), who combined the outcomes-led, objective-based model by Tyler (1949) and the action research, process-inquiry model (Stenhouse 1975; McKernan 2008) in a case study of the process of renewing a postgraduate climate change programme. He suggested that applying aspects of two curriculum approaches had several strengths. In addition to collaboration, effectiveness and empowered evaluation, it could result in higher job satisfaction for the academic staff.

Another example is Yorke and Knight (2006), who elaborated a model that would simultaneously accommodate the national, global and social good, respect academic values and support the development of students. They suggested that promoting complex learning is not an alternative to or separate from the employability agenda. On the contrary, the attainment of societal goals such as economic and social gain is likely to require complex learning. Employability was defined by understanding, skilful practices, efficacy beliefs and metacognition (USEM). In order to support the adoption of these, a programme-level and interrelated approach to curriculum development and implementation was needed. A special challenge seemed to be a tradition in which curriculum planning in a university was at individual rather than programme level, as Yorke and Knight (2006: 572) noted: "the academy still tends to be a relatively loose aggregation of disciplinary specialists".

To overcome the challenges, a holistic curriculum change was suggested. A rather typical way of approaching curriculum as process was emphasising the cognitive and constructivist approach to learning. Ideas such as enquiry-based learning, for example, appeared to solve many problems of the previous curricula (e.g. Fredholm Nilsson and Silén 2010). It seemed also a way to widen the participation agenda, according to which the curriculum could be designed such as to offer multiple study possibilities, despite various constraints. These benefits could be fostered when the curriculum was created in dynamic interaction with students and/or other partners (e.g. Foskett 2005).

Overall, these views indicate that such dynamic processes enhance the emergence of students' full potential, which could be understood through the concept of *competency* (pl. competencies), as distinct from the notion of *competence* (pl. competences). Following several scholars (e.g. Kurz and Bartram 2002; Woodruffe 1992), the competence examined in the previous section refers to what students need to do to carry out a specific task (i.e. a learning outcome). Its objective is often expressed as a minimum acceptable standard. In contrast, competency reflects a wider scope of understanding, and is expressed in action terms identifying the range of behaviours that will enable students to perform to a high potential in a range of situations. Competencies are therefore seen both as transferable and aspirational. Accordingly, curriculum is conceptualised as a process where both the knowledge and ownership are negotiated.

Curriculum as empowerment

In the present data, one striking feature was the way in which curriculum was explored from the point of view of equality and cultural perspectives, including disciplinary, international, minority and gender views. Regarding ownership, emancipatory power relations were a key

question, arising in the discussion of what is thinkable and doable and who has access to what in various cultural and institutional layers underlying the curriculum. Consequently, knowledge emerged as a question of knowers and empowerment.

Who has access to powerful forms of knowledge is a question addressed by Shay (2013) in her article discussing curriculum differentiation in HE. In her work, Shay's argument focused on whether all students have access to powerful forms of knowledge and thereby to society's important conversations. Shay (2013: 580) encouraged an integrative approach and the crossing of disciplinary boundaries if curriculum was to 'equip our graduates to understand and resolve the most critical pressing problems of our time'.

In addition, Clegg (2011: 94) called for 'curriculum, pedagogies and approaches that go beyond neo-liberal aspirations towards mobility and employability and towards a recovery of the values of critical pedagogy found in feminist and critical race theory'. She admitted that there is no simple resolution to the present dilemmas. One way to promote this kind of reinvention of curriculum was presented by Lambert *et al.*, who relied on the approach of critical pedagogy. They suggested that 'a pedagogy that foregrounds *praxis* demands that students and teachers work creatively, take a positive approach to risk, and are open to the possibilities offered by employing collaborative methods of thinking and researching' (Lambert *et al.* 2007: 529). In the context of entrepreneurialism in the curriculum, they suggested that teaching and research should be regarded as part of same scholarly enterprise. Their approach challenged the traditional enterprise models and trend towards the commodification of HE. When merging research with teaching, it was argued, the goals of the academy are emphasised, instead of the goals of policy. Besides, this approach also enables students to be co-creators of knowledge.

Arguments for including students as partners in curriculum processes were outlined in a study by Brew (2013), among others, who suggested a holistic model for research-based learning decision making. She stressed curriculum development that encourages thinking about the ways to engage students in the excitement of discovering new ideas. According to Brew, education should provide support for students by preparing them to be critically reflective of the society in which they live, to develop their capacity to find and judge evidence and to be open to different knowledge in different ways. This kind of conceptualisation of curriculum helps students to take ownership of the learning and position them as co-creators of the curriculum in HE. Then the knowledge – or the powerful knowledge – is not just a matter of access but also something to define, reflect on and engage with.

However, the boundaries around legitimate academic knowledge became visible when novel curricular innovations were proposed. In Coate's (2006) exploration of curriculum in women's studies, she stated that academic credibility comes from established disciplines and that interdisciplinarity has been portrayed as a more feminine approach. She argued that certain topics, such as interdisciplinary and/or women's studies, are marginalised in mainstream HE, and that 'curriculum reveals the power of pedagogic discourse, regulating what is thinkable and who can think it' (Coate 2006: 417). The gender perspective and experiences of exclusion arose as well in a study of the medical curriculum by Phillips (2009). These examples indicate the complicated power relations around legitimate knowledge in curriculum and who has access to define it.

When a new curriculum is established in a different cultural context, the novel frames made visible also the different views on ownership. Walsh *et al.* (2005) analysed a process of social work curriculum development between Western partners and Romania. There was disagreement about whether marginalised groups would be included or excluded when the

social work curriculum was implemented. The students were opposed to working with Roma and Hungarian minority populations. The question of students as owners and co-creators of the curriculum and the issue of powerful knowledge appeared here in a new light: how to include anti-oppressive models of practice in the curriculum without allowing the curriculum itself to become oppressive. Thus, the values underpinning the curriculum were highlighted.

As previously indicated, curriculum develops through the dynamic interaction of planning, action and reflection (see Annala and Mäkinen 2013). In the present data, values, power relations, access to powerful knowledge and culturally sensitive practices were discussed. This reflects curriculum as *praxis* in the sense of having a constant critical evaluation and reflection of the valuable and inalienable issues in conceptualising curriculum in HE.

Discussion

The identified four conceptualisations resonate with our earlier studies in which curriculum in HE emerges as an intentional and dynamic process that reflects disciplinary cultures and traditions, and the relationship between university education and the changing world and society (Mäkinen and Annala 2010; 2012). The dynamics and intentions arise within the university traditions and in the relationship with the world outside: how the knowledge base evolves from stable content to negotiated, empowering knowledge, and how the ownership of curriculum is moving from control towards emancipation.

The present study shows that curriculum does not have a shared meaning in HE research, nor widely shared theories or authorities. This leads to various presumptions and a lack of cumulative knowledge construction among researchers, but also contradictions among the practitioners with a different understanding of the object of activity (see Engeström 2001). We have found many borders that need to be crossed: between HE studies and curriculum studies, between disciplinary boundaries, and between local, national and global boundaries. In order to obtain new knowledge and understanding about curriculum it is important to be aware not only of one's own perspective but also of its relationship to the other possible perspectives.

Though the educational context differs in compulsory and higher education, curriculum theories have tried to tackle those same problems in the field of curriculum studies. Yet scholars in HE seem to ignore some of the basic frameworks of curriculum studies. Respectively, scholars of curriculum studies have not paid much attention to the HE context, even though it could reciprocally offer new perspectives, both theoretical and methodological, to curriculum studies. It has been suggested that curriculum theory is in crisis; when focusing only on ideology critique behind curriculum initiatives it has lost its primary object, namely how curriculum theory can contribute practices and research in various contexts (e.g. Priestley 2011; Young 2013).

One way to understand the complexity of research on curriculum is to consider the different historical backgrounds of the Anglo-American curriculum and the European-Scandinavian Bildung-Didaktik tradition. These traditions differ in methodological choices when studying curriculum, as well as in emphasising different perspectives and values: is the focus on well-defined learning processes or on more open questions of moral, cognitive, aesthetic and practical structures of curriculum (Autio 2006)? Although different histories and disciplinary perspectives exist, we suggest that curriculum development may have implicit features of many traditions, yet still remain loyal to the traditions of HE in general. We have found that, in these cases, limited perspectives – such as what works in practice or criticism of the neoliberal ideology in education policy and curriculum initiatives – are developing into a more multilayered understanding of the issue and new approaches to curriculum emerge. Yet

research on curriculum in the HE context calls for increasing discussion of the various conceptualisations of curriculum.

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