Towards an Ecology of Participation: Process Philosophy and Co-creation of Higher Education Curricula

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Abstract

This article brings together the authors' previous work on co-created curricula (Bovill et al., 2011; Bovill, 2013a; Bovill, 2014) and on partnership and ethics (Taylor and Robinson, 2014; Taylor, 2015), to develop the concept of co-created curricula as an ecology of participation. In doing so, it deploys Alfred North Whitehead’s process philosophy to formulate a new way of considering co-creation in the curriculum and co-creation of the curriculum in higher education. Two empirical examples are used to illuminate what such an approach offers. From this, we outline three dimensions of an ecology of participation: a process of becoming which recasts subjectivity; acting well in relation which enacts concern; and an orientation to harmony in which difference in equality is valued. The contribution of the article is twofold: first, the concept of an ecology of participation takes forward current thinking on higher education curricula and partnership ethics; second, its use of process philosophy provides a new lens to consider co-creation in the curriculum and co-creation of the curriculum.

Keywords

A. N. Whitehead, process philosophy, curriculum, co-creation, ecology of participation, higher education

Introduction

The purpose of this article is to develop the concept of ecology of participation as a novel way of considering co-created curricula in higher education. We utilise some aspects of Alfred North Whitehead’s process philosophy to assist the formulation of an original, theoretically-inflected, ethically-oriented approach to co-creation in the curriculum and co-creation of the curriculum in higher education. The context for the discussion is higher education in the UK. While this particular national context may

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be unfamiliar to some, its contours will be recognisable to many researchers and educationalists throughout Europe where neoliberal regimes have taken hold, in which discourses of the market, performativity and outcomes predominate, and where an alternative vision of curricula enactments and engagements are needed. In addressing this need, the article takes forward our previous work on co-created curricula (Author 2 et al., 2011; Author 2, 2013a; Author 2, 2014) and partnership and ethics (Author 1 and Other 2, 2014; Author 1, 2016) to build an argument for the consideration of co-created curricula in higher education as an ecology of participation.

We use Morriss’s (2002: 571) view that ‘an ecological paradigm recognizes integration with the world and others’ as an impetus to develop the concept of curriculum co-creation as an ecology of participation. We suggest that curriculum co-creation, when conceptualised as an ecology of participation, enables greater scope for individuals’ to be educational actors; creates a greater role for sociality and for the mutual constitution of action and meaning within curriculum assemblages, and draws attention to co-creation as an embodied, embedded and relational practice of curriculum-making. Co-created curricula can be envisaged as an ongoing, dynamic and emergent formation which, via the particular ecology of participation at hand, might foster conditions for well-being, care and interconnectedness, and which provides a compelling means to contest marketised, neoliberal regimes in higher education. The theorization of co-created curricula as an ecology of participation is explored through two contrasting and complementary empirical examples from practice. One example focuses on engaging undergraduate students as curriculum partners, while the other involved staff participants on a Postgraduate Certificate in Academic Practice.

The article is structured as follows. The next section provides a theoretical context and framing for the ensuing discussion. The two empirical examples are then introduced. The subsequent discussion explores the examples through the lens of Whitehead’s process philosophy. Reflection on the relation of theory and practice enables us to propose three components of an ecology of participation: a process of becoming which recasts subjectivity; acting well in relation which enacts concern; and an orientation to harmony in which difference in equality is valued. The
conclusion pulls the analytical threads together and synthesises the key insights concerning the utility and value of the concept of ecology of participation.

**Context and Theoretical Framing**

This section addresses three questions – Why is a re-consideration of curriculum needed now? How does this re-consideration speak to debates within didactics, learning and teaching? Why use A. N. Whitehead’s work? – to ground the need for rethinking co-created curriculum as an ecology of participation and to locate the article within ongoing debates about curriculum, learning and teaching.

**Why is a re-consideration of curriculum needed now?**

There has been a significant growth in interest over the last five years in co-created curriculum and ‘students as partners’ initiatives in UK higher education and internationally (Author 2, 2013; Cook-Sather et al, 2014; Healey et al, 2014). Ryan and Tilbury (2013) describe ‘co-creation’ as one of six key pedagogical ideas in higher education, and place co-creation and learner empowerment at the centre of current developments in flexible pedagogies in higher education. Co-created curriculum requires a significant shift in the ways we conceptualise and practice curriculum. In essence, it is about shifting the ways in which teachers and students relate to one another – moving away from pedagogic practices based in directorial teaching approaches which allocate subordinate and mainly passive roles for students towards ways of working based upon greater student agency and engagement (Barnett and Coate, 2006; Author 2 et al, 2011; Mann, 2008). The shifts speak both to the need within UK policy discourses to consult with students more widely and more consistently about their higher education experiences (BIS, 2011), and to lecturers’ allegiance to the use of dialogic modes of learning and teaching to challenge the instrumentalism and individualism that (they fear) marketization brings (Author 1 and Other 1, 2014).

Despite this growing interest, Barnett and Coate (2005: 6) note that within higher education, ‘there is – largely, if not entirely – a silence about curriculum.’ They suggest that:
In the absence of a serious debate about curriculum per se, the tacit idea of curriculum that is developing is unduly narrow. It is also dominated by a determination to see curricula framed in terms of economically productive skills. Students as such are only minimally implicated in this dominant conception of curricula. They come into play only as potential bearers of producing economic value rather than as human beings in their own right. (Barnett and Coate, 2005: 24).

The reticence to discuss curriculum may be related to the confusion caused by many different ways in which the term is used in the broader literature.

Fraser and Bosanquet (2006) outline four conceptualisations of higher education curriculum: ‘a: the structure and content of a unit (subject); b: the structure and content of a programme of study; c: the students’ experience of learning; d: a dynamic and interactive process of teaching and learning’ (Fraser and Bosanquet 2006: 272). The first and second definitions perhaps best represent the dominant understanding of curriculum and follows Tyler's (1949) conceptualisation of curriculum as a clear sequence of steps that are a plan for learning and which deliver the aims that institutions wish students to achieve. However, Tyler’s view emphasises the technical and rationalistic dimensions of curriculum, a view which has been critiqued for isolating structure and course content from students’ experiences and thereby missing the complex reality of learning (Bron et al., 2016). In contrast, Fraser and Bosanquet's third and fourth definitions begin to capture a sense of students’ ‘being’ in relation to curricula. These latter definitions move away from curriculum as simply content, syllabus and structure, towards curriculum as a nuanced and interactive process. This more dynamic conceptualisation is expressed in Barnett and Coate's (2005) notion of the curriculum as an interplay between knowing, acting and being; in Pinar's (1975: 400) concept of ‘currere’ which focuses on process; and in Boomer’s (1992: 32) notion of ‘curriculuming’. These concepts share a view of curriculum as an interactive negotiation between students and teacher, as being open for debate, and as a process which can be improved upon in practice (Stenhouse, 1975). They also trace a line of curriculum thinking back to Dewey’s work on democracy and progressive education.
These differing notions of curriculum speak directly to our central argument in this paper that practices of curriculum co-creation can benefit from a new theorisation grounded in the view that the higher education curriculum is not an object into which we stuff (and often over-stuff) pre-formed disciplinary content but, rather a collaborative and emergent endeavour involving co-constructing knowledge. Yet, despite the growing evidence of beneficial outcomes (Author 2 et al., 2001; Cook-Sather et al, 2014; Healey et al, 2014), there is still some distance to go to enact co-created curricula more widely in higher education (Author 2, 2013b). As Apple (1981: 115) argued, ‘there exists in curriculum development ... something of a failure of nerve. We are willing to prepare students to assume only some responsibility for their own learning’. This ‘failure of nerve’ may be because co-creating curriculum requires substantial shift in the ways in which students and teachers relate to one another. Specifically, as Author and Other (2009: 168) note, it requires that ‘the hierarchical, one-way, teacher-centred, anti-dialogical approach of traditional education’ is displaced in favour of ‘mutuality, co-operation, trust and “interchangeability” of teacher and student roles.’

While such shifts are possible and desirable, they are not easy to enact. They might be more easily achievable with smaller groups of students – clearly a challenge in the current mass UK higher education system. They may also be problematic in the current performative, individualised and increasingly outcomes-driven landscape of contemporary higher education. We also acknowledge that ‘the challenges of working in partnership ethically suggest co-creation in the curriculum (within a course) may be easier than co-creation of the curriculum (students and staff designing an entire programme), at least until an institutional ethos develops that values student–staff partnership’ (Author 2 et al., 2016: 206).

Despite this, our argument is that co-creating curricula is an endeavour worth pursuing for many reasons: it enhances student belonging; increases engagement in learning; improves peer relations; enhances curriculum creativity; and is underpinned by, and encourages, values of respect, responsibility and reciprocity.

How does curriculum co-creation speak to debates within didactics, learning and teaching?
As British academics working in UK higher education, we occupy a specific national location within the Anglophone tradition of learning and teaching. This tradition is distinct from the European tradition of didactics. For many English-speaking educationalists the word ‘didactic’ has somewhat negative connotations, and so ‘pedagogy’ has come to be the preferred term. However, pedagogy and didactics have an ‘overlapping and intersecting history’ in that both are founded in the separation of ‘teachings’ (content to be taught – or curriculum) from teaching (procedures for the inculcation of content), and they have been defined in similar terms (Hamilton, 1999: 138). In the Germanic tradition, didactics is a ‘human science’, and an academic discipline in European teacher education oriented to ‘the study of teaching as a situated schoolroom craft’, in which it combines the ‘small’ questions of ‘what’ and ‘how’ with the larger questions of ‘why?’ (Hamilton, 1999: 145). The Anglophone tradition is, in contrast, a curriculum tradition. Hamilton (1999) characterises this tradition as pluralist and interpretive; as being more interested in the interaction between education and politics; and in generating frameworks for practice rather than on a ‘prescription of methods’ as in didactics.

While our framing of the concerns in this article falls (naturally and most readily) into the curriculum/pedagogy tradition, there are three ways in which the article directly addresses concerns which arise in both traditions. The first is a shared concern with the micro or ‘small’ questions: both traditions focus on curriculum enactments as situated events which happen in the here and now of the classroom. The second is a shared interest in ‘larger’ questions: both traditions recognise that curricula are normative and entail questions of values, ethics and power. The third shared concern is to do with teacher-student relations. In didactics, this has been conceptualised via the didactic triangle, that is, the relations between teacher, student, subject; in pedagogy, this is envisaged via mode of learning and teaching, for example: whether students adopt a deep or surface approach; whether teaching is discipline/subject or skills-based; or whether a ‘banking’ or student-centred model is adopted. These shared concerns suggest that our elaboration of the co-created curriculum as an ecology of participation has value across the curriculum/pedagogy and didactics traditions.
**Why use Alfred North Whitehead’s work?**

Recent years have seen a burgeoning interest in Alfred North Whitehead’s (1861 – 1947) process philosophy across the arts and humanities but as yet no studies have used Whitehead’s philosophy in higher education. Our article begins to address this neglect. It is our view that Whitehead’s process philosophy provides a useful lens for approaching the co-created curriculum in higher education. For readers unfamiliar with Whitehead’s work we here provide a brief introduction to its underpinning principles.

Whitehead’s process philosophy originates in his interest in early quantum physics which saw the world as being shaped by activity and energy. He used these scientific insights in the service of a philosophical ‘logic of complex relational systems’ (Stenner, 2008: 98) which came to be known as process philosophy, which at the risk of oversimplification, has a basis in the following four main contentions:

1. In reality there is no separation of mind and body; the insights from quantum physics enable us to understand mind and body as mutually entangled and co-emergent. Humans are not separate from nature and the world but part of it, emerging with it: there are no absolute distinctions between subject and object; instead subject and object are formed through the emergence of hybrid entities and the processes by which they are assembled and mutate;

2. In actuality there are no static substances, only events, occasions, and processes. These events can be as small as the movement of subatomic particles, but include the activity of humans, and of a range of bodies (humans and nonhuman objects and things) in a complex system;

3. Events unfold in line with the principle of creativity, and that creativity is a vehicle for the production of novelty; each event is a unique occurrence, albeit that a new event emerges from a synthesis of past events;

4. Reality is constituted by events called ‘actual entities’ which are ‘the final real things of which the world is made up’ (Whitehead, 1985: 18).

Process is the central component of Whitehead’s philosophy. In Process and Reality, Whitehead (1985: 22) wrote: ‘the actual world is a process and process is the becoming of actual entities’. Whitehead saw process as a fundamental fact of
experience, which ‘involves the notion of a creative activity belonging to the very essence of each occasion’ (1968: 151). His philosophical interest in the creative emergence of the new in the world resonates deeply with our educational interest in the creative emergence of the curriculum (which is ‘new’ in its every enactment) though a process of co-creation.

There are a number of compelling reasons, therefore, for using Whitehead to elaborate our arguments. First, we are interested in reciprocity, emergence and creativity as learning and teaching practices which produce the curriculum not as pre-formed content but as an ongoing process of co-construction (see above). Second, Whitehead’s interest in process encourages him to focus on the ‘becomings’ of activities via their co-constitutive emergence as ‘actual events’ (Tamboukou, 2015) and this, for us, encourages a ‘micro’ focus which hones in on the actual practices through which curriculum co-creation occurs. This is important because (as we show later in our empirical examples) it is in the details of curriculum practices that power shifts, normative questions of value, and ethical questions become apparent. Third, using Whitehead’s process philosophy helps illuminate co-created curricula not as an achieved state but as a continuing and reflexive struggle for a more ethically sustainable and democratic higher education.

We engage these four contentions of Whitehead's process philosophy in the ecology of participation that we propose in this article. In brief, the first dimension of the proposed ecology of participation focuses on subjectivity as a process of becoming which envisages humans as integral to, and emerging from the world (this dimension links with Whitehead’s contentions 1 and 2 above). The second dimension of the proposed ecology of participation – acting well in relation – focuses on the enactment of concern, building on Whitehead’s view that all events are relational and that humans interact with the world and with one another in creative ways (see contention 3 above). The third dimension of the proposed ecology of participation focuses on an orientation to harmony in which difference in equality is valued, which develops from Whitehead's view that reality (‘actual entities’ within the world) progresses towards a dynamic balance between creativity and differentiation (see contentions 1, 3 and 4 above).
Having outlined our reasons for using Whitehead, and how the four key dimensions of his philosophy relate to our proposed ecology of participation, it will perhaps be useful to clarify how we are using Whitehead. Biesta (2014) notes that a key difference between Anglophone and Germanic traditions is that, in the former, education is an object of study relying on input from a number of academic disciplines, of which philosophy is one, while in the latter, education is an academic discipline in its own right and its object of study is the formation of the individual. In line with this, and as UK educationalists working in the former tradition, the co-created curriculum in higher education is our ‘object’ of study and our approach involves putting Whitehead’s philosophy ‘to work’ in relation to the analysis of that object. Whitehead’s concepts are, then, resources to help push forward our thinking about the different dimensions of curriculum co-creation and how they may constitute an ‘ecology of participation’. Whitehead offers a theoretical lens to reflect on examples of practice and, from the synthesis of both, we elaborate the concept of ecology of participation. In line with the four main contentions of Whitehead’s philosophy outlined above, the proposed ecology of participation is rooted in the dynamic, processual nature of relationships, interactions and events which initiate and sustain curriculum co-creation in particular temporal and spatial locations and pedagogic networks.

A Note on Methodology

In this article, aspects of Whitehead’s processes philosophy are used as an interpretive theoretical lens to explore some actual examples of curriculum practice. The methods of data collection and evaluation were not informed by Whitehead's ideas at the time. Rather, we are applying Whitehead's philosophy retrospectively as a means to generate a new perspective on co-created curriculum. Students’ comments and visual data have, therefore, been selected and used purposively to meet this analytical aim. Prior to data collection, ethics approval was granted in both of these examples, from the University Ethics Committees at our respective universities. Pseudonyms have been used to maintain student anonymity and confidentiality. We now turn to the two examples of practice.

Curriculum Co-creation: Two Examples from Practice
Educational Spaces: Theories and Perspectives Module

This module is part of BA (Hons) Education Studies undergraduate degree at a university in the North of England and is taught in the first semester of the students’ final year. The Module Handbook describes the content and process of the module as follows:

This module explores theories and perspectives on educational spaces, and applies these in the analysis of historical and contemporary examples of educational spaces. The module analyses the physical, material, cultural, social, global and virtual spaces of education and learning. It considers the increasingly diverse nature of the spaces and places education and learning take place in; and explores how these spaces and places impact on, and potentially transform, learning, educational identities, and the meaning and value of education. Through the authoring and web-publication of an academic article the module enables students to make a contribution to the production of academic knowledge in an important, but as yet under-explored, area of educational analysis.

The module was chosen as a focus in this article for three reasons. The first is that space is fundamental to individual and collective experiences of education. All education happens somewhere, whether in the formal spaces of classrooms and lecture halls, or in informal spaces such as in home, bedroom, on the bus or train. Any of these spaces can conceivably be drawn upon in the module. Second, an increasing number of educationalists are taking up debates about space in ways that are illustrative of the wider ‘spatial turn’ that has taken place across the social sciences in the last 10 years (Kalervo, Gulson and Symes, 2007). Third, educational space is one of the first author’s central research interests (Author 1, 2013; 2014) and this led her to share her own research with the students during the module.

In the module assessment students write autoethnographic articles of their experiences of educational spaces during their learning careers, use theories of space and place to frame and critique their experiences, engage in an anonymised class peer reviewing process on article drafts, work up their articles into a final version, and then publish
their finished articles in the web-journal, edited by a student editorial team. During this process, students are engaged as curriculum partners in an authentic and complete cycle of academic knowledge production. Students have input into the module’s session content and delivery, and the format and content of the journal articles students write is open – they may integrate visual and creative written texts such as poems, mood board, narratives and vignettes into their individually-authored article. At the end of the module, students are invited to offer feedback on their experiences of the module though focus groups and interviews.

Student Engagement Course

The Postgraduate Certificate in Academic Practice at a Scottish university is a compulsory masters level programme for new academic staff with teaching responsibilities and who have less than three years teaching experience. In the second year of the programme participants can elect to take a course on Student Engagement. This course recognises the key role that student engagement plays in student retention, motivation and enhanced learning outcomes and it is also one of the second author's key areas of research interest and activity; it was co-designed by the second author, in collaboration with one of the second author's PhD students, and a colleague from the Academic Development Unit.

The aim of the course is to provide staff participants with opportunities to explore definitions of, and research evidence about, student engagement in higher education; to investigate and discuss different approaches to student engagement in relation to their practice; and to contrast approaches in different disciplines. The course provides space for participants to interrogate many different current practices and conceptualisations of student engagement. The teaching team also aim to model engagement practices in the way the course is taught, through the learning environment created, and in the way staff relate with the course participants – practising what they preach. Some of these student engagement techniques offer pedagogical solutions that can help improve student engagement with reading, and that staff participants can use within their own future teaching.
As part of the Student Engagement course staff participants are offered the opportunity to co-design the content and processes of one of the classes. Participants are invited to bid for 10, 15 or 30 minute time slots in a future class and to either work alone or with one or more of their peers to lead a student engagement related activity based on something they want to share, a question they want to discuss or an exercise they want to test out. Participation is optional. Participants’ responses to the invitation to co-create and lead class activities varies. A range of collaborative evaluation has been undertaken during the first year of the course in 2015-2016 including start, stop, continue exercises focused on both the teacher and participants, and an evaluation where participants designed the questions that needed to be asked at the end of the class to elicit whether participants had learned anything.

**Process Philosophy and Co-creation of Higher Education Curricula: Towards an Ecology of Participation**

In the discussion which follows, we use data from the two examples above, as an empirical grounding for putting Whitehead’s process philosophy to work. These data are used to explore connections between the experiences of curriculum co-construction and Whitehead's ideas, and as the basis for the theoretical development of the concept of an ecology of participation. We deal, in turn, with three dimensions of an ecology of participation: becoming; acting well in relation; and an orientation to harmony.

1. A process of becoming: Recasting subjectivity

Whitehead’s process philosophy is based in a refusal of the bifurcation of nature into subject and object, into separable and irreconcilable entities. This view entails a qualitative shift from a mechanical view of the universe to one founded in energy, activity and process. Whitehead illustrates this through the example of listening to music. The subject (person listening) hears notes of music, feels them in her body, and becomes a subject with the notes in an immanent, embodied experience of hearing and listening. For Whitehead, her subjectivity is a ‘becoming’; she emerges as a subject through a process of becoming entwined-with, hearing-with, listening-with and feeling-with the notes. The music does not exist anywhere ‘outside’ her or she
‘outside’ it. She and the music are entangled-with each other in an activity of becoming. As Stenner (2008: 97) explains, in process philosophy ‘there are essentially no self-contained activities within limited regions … nature is a theatre for the interrelations of activities. All things change, the activities and their interrelations’.

Understanding subjectivity as this endless process of mutually co-constitutive becoming provokes us to think differently about students’ curriculum experiences. To illuminate this, we begin with two specific instances from each of our respective examples. The first is from Shona who produced a composite set of four images and a poem as the autoethnographic materials for her Educational Spaces article. The image is included here with Shona’s reflections on it from a subsequent interview.

Figure 1 Who Am I?

Yeah, I’m interested in [identity] and I’ve still not fully cracked it, it’s hard to comprehend, it’s trying to like analyse, a person trying to analyse your own person, it kind of is a catch 22 in a way … I think it’s very easy for someone else to think they can analyse you which is often seen in stuff like psychology and mental health, to do with the physical side of you, people can sit and diagnose you and think, “Oh I think your personality’s like this, I think that,” but a lot of people say the only person that is going to know is you, but then how can you? … I looked at my multiple identities … they don’t completely change when I come to university, [or] when I go to work, but you have to adopt, for example when I go to work you have to adopt that organisational expectation of you, you have to be professional, you have to wear a suit, which I hate, take my piercings
out … it is really hard to describe, your personality’s still the same or similar. I think in different situations parts of your personality are stronger than others and then some you’ll have to subdue (Shona, interview).

The second example is from an anonymous academic staff participant response to one of the evaluation questionnaires on the Student Engagement course asking participants to define ‘student engagement’.

Engagement is when students are an active part of the class, i.e. when the class could not run without students. In other words, when students participate in class with discussion and other forms of participation. It is also a more passive quality (although it can lead to different behaviours) - i.e. when students go away from the class inspired with new thoughts and wanting to know more about a subject. Overall both of these should lead students to want to know more and not simply to learn how to pass a course, but to use the knowledge from the course in order to think critically or to activate/challenge the knowledge being produced.

The first example illuminates Shona’s ontological struggle to explain and represent her multiple and continually shifting identities as she is perceiving, experiencing and reflecting on them. This struggle has arisen for her precisely because of module co-creation processes which she had actively shaped and which required her to move away from a sense of the curriculum as something ‘owned by’ staff and ‘presented’ to her, and of the idea of knowledge as ‘separate content’ which is presented in sequential order towards knowledge as something which emerges from her embodied and enacted subjectivities in her daily life. The autoethnographic texts (image and poem) she produced raised for her some fundamental questions about her subjectivity as a mode of immanent becoming. She entitled her image ‘Who am I?’ Understood in Whitehead’s terms, Shona’s question tries to accommodate her experience of the collapse of boundaries between subject and object, internal and external: Shona does not ‘know’ herself as if from the outside but, rather, her experience of her different clothes, jobs, piercings, things are at the same time an experience of her self. While it might be said that the purpose of autoethnography is to create a space for the personal, there seems to be far more going on here. It is not just that Shona is ‘using’ autoethnography to represent aspects of her identity; it is rather that autoethnography when used as a mode of curriculum co-creation throws up profound ontological
questions about the experience of self and becoming. As Shona’s experience relays, the self is never stable, subjectivity is in a continually emergent state, and there is no core or essential identity ‘within’ us, as notions of the Cartesian self might presume. Shona’s words point to how she is grappling not with a theory of multiple subjectivity (which might be the case if students are reading postmodern accounts of identity as in a ‘traditional’ curriculum), but with her experience of it, with articulating her felt-embodied sense of her subjectivity as process, flux and change as it is actually happening. This experience is made possible by her participation in co-creating the curriculum in this module.

In the second example, the participant highlights that their ‘class could not run without the students’, but emphasises that students’ presence is not enough: students need to participate actively in some way. Students do not actively participate in isolation, they participate in relation to the teacher, in relation to other students, and in relation to all the other natural and non-organic forms in the classroom (air, atmosphere, noise, light, materials). This teacher recognises that active participation might be visible through actions such as a student contributing to discussions, but equally it might be hidden where a student is listening and thinking – and this move away from equating participation with verbal contributions in class makes us think differently about what it means to be ‘actively engaged’. This view of engagement emphasises that learning is an entanglement of body and mind, and that different forms of participation can lead to learning in and beyond the class. We might say, then, that the ‘class’ is brought to life by the teacher, the students’ and all the other organic and inorganic subjects in a process of becoming together through co-presence and jointly acting in relation to one another.

As identified earlier, one of the key aspects of process philosophy is that mind and body are mutually entangled and co-emergent. We humans are not separate from nature and the world but part of it and we emerge with it. There is no absolute distinction between subject and object; subject and object emerge together in hybrid entities and assemblages. We see this happening in practice in both examples. Shona’s subjectivity is a becoming which emerges with her changes in clothes, piercings, job. Her subjectivity is a becoming of subject and object in an activity of realization. For Whitehead, activity is what sets process ontology apart from a
philosophy of substance (which presumes essence and stability). Activity coheres in what Whitehead referred to as an ‘actual occasion’ in which potential is realized in concrete form. Shona’s subjectivity is a process of becoming in the actual occasion of curriculum co-creation – via the image, the interview, the written article; just as the anonymous teacher in the second example indicates that engagement is an intrinsic and active process of engaging in a complex system of classroom inter-relations. Both Shona and the teacher, in Whitehead’s terms, add something new – in their dynamic becomings – to the universe.

It is evident from this that process philosophy helps attend to details of how we are constituted through flux in, with and by the world. It also helps recast subjectivity through the idea that we are forever becoming, never ‘finished’ – we (students and teachers) are in continual process. Our examples suggest that students’ participation in co-creating curricula helps materialize this sense of becoming. Most important is that it breaks down traditional curriculum barriers between knowing, sensing and feeling – consciousness is not oriented to knowledge ‘about’ something separate from us, but becomes consciousness of ourselves in the world. This is why ‘becoming’ as a process which recasts understandings of subjectivity is the first dimension of our development of the concept of curriculum co-creation as an ecology of participation. It makes a difference in thinking about curriculum co-creation (as it does to thinking about learning, pedagogy or education more generally) if we begin with the idea of individuals as processes-in-relation, rather than as atomized bodies. The question of ‘who am I?’, in process philosophy, is always about attending to ‘who/what/how am I becoming-with?’. Our contention is that this more distributed understanding of subjectivity may help us appreciate others’ existence and experiences – and may help forge new ethical connections: ‘acting well in-relation' which is the subject of the next section.

2. The process of acting well in-relation: Enacting concern

We explore the second dimension of an ecology of participation: acting well in-relation through Whitehead’s articulation of ‘concern’, by which he means the ‘affective tone’, that is, the emotional tenor and supra-individual impulse, which imbues every subject-object relation and which Whitehead (1933: 226) considered to
be ‘the fundamental structure of experience’. For Whitehead, ‘concern’ is more than something that just happens or arises in times of crisis or when confronted by a problem; concern is a connective force, traversing individuals and tying them together in deep, often pre-conscious, ways. This is what Whitehead (1968: 167) says about concern:

Each occasion is an activity of concern, in the Quaker sense of that term. . . The occasion is concerned, in the way of feeling and aim, with things that in their own essence lie beyond it.

For it is precisely when ‘engaged in its own immediate self-realization’ that an occasion finds itself most vitally ‘concerned with the universe’ that lies beyond it.

In this formulation, concern emerges in and with occasions, and is realized in-relation within those occasions. Concern is not then simply a linear transmission of feeling of or from one individual to another. Occasions considered as activities of concern, in Whitehead’s sense, are ‘actual occasions’ which concretise the flux of the universe into experience. The concept of occasion is then, as Hernes (2014) argues, ‘a metaphysical and analytical construct to describe actual experience’.

We want to explore concern in two occasions from our examples. The first is from the Educational Spaces: Theories and Perspectives module:

Students work together to co-create the peer reviewing protocols for the class peer reviewing process in which each student anonymously reviews two of their peers’ article drafts. The class activity to write the protocol happens in week six, when students have settled into the module, are familiar with its way of working, and have had input into co-creating module content. The peer reviewing protocol activity is introduced at the beginning of the module and students are reminded periodically that it is scheduled in for week six. One and a half hours of a three hour taught session is allocated for this co-creation activity. Students generate a list of ‘rules’ or ‘codes’ and accompanying guidelines which serve as a collectively agreed basis on which students will then write their reviews of their peers’ draft article (as in an authentic journal peer review process).
The second example is from the *Student Engagement* course

One participant chose to give a short presentation about her plan to move from teaching all the lectures in one of her courses herself and, instead, to invite her students to work in groups to investigate some of the key topics on which she currently lectures. Her plan was that each group would present their work, followed by class discussion and she would give a shorter lecture input. She asked the Student Engagement class participants five key questions that she was struggling with in this plan. The class discussed these issues in depth for 20 minutes and provided feedback to the participant.

Variants of these activities will be familiar to many lecturers – they are the ‘bread and butter’ of effective group work. Both activities have been successful and rated highly as valuable learning experiences by individual students, the class, and ourselves as lecturers. Both activities are dialogic, authentic and challenging and fulfil many of the conditions of curriculum co-creation.

What does exploring them via Whitehead’s concept of ‘concern’ add? First and foremost, it tunes us into the affective tone of each actual occasion. As many have noted, students (and lecturers’) emotional experiences in higher education largely remain under-explored and under-theorised, as a result of the longstanding privileging of reason over emotion (Beard et al, 2007; Leathwood & Hey, 2009). Taking account of the affective helps us see higher education as a more holistic experience: reason and emotion. Second, a focus on concern brings to the fore the relational and situational nature of ethics. Concern moves us, often involuntarily and instantaneously, into thinking-feeling-action. Shaviro (2008: 1) notes that ‘concern implies a weight upon the spirit. When something concerns me, I cannot ignore it or walk away from it. It presses upon my being, and compels me to respond.’ Whitehead’s notion of concern highlights experience as a mode of being affected by others. It is an opening outwards, a move towards what is beyond myself. Concern construed in this sense is apparent in both our examples.

Students find the peer review protocol activity both anxiety-inducing and energising. They take it very seriously and class talk is often about the ‘responsibility’ they feel in
writing the protocol. This is because they want to ensure that the quality, content and structure of the protocol adequately reflects their sense of wanting to do their best for their peers. Students say this sense comes from knowing they are all ‘in this together’ and they too will be on the receiving end of another person’s peer feedback. Furthermore, they all observe the protocol faithfully when doing their peer reviews. The participant on the Student Engagement Course reported afterwards that the constructive questions and critical feedback she received from her peers exceeded her expectations, and she felt the discussions were genuinely helpful. She believed she received more useful feedback than she would have received if she had asked for feedback from her departmental colleagues.

Considered in terms of curriculum co-creation, concern is an enactment of a felt sense of relational responsibility that tangibly suffuses genuine acts of participation. It is a ‘more than rational’ feeling, a response which engages heart as well as mind. Concern creates ontological space for the recognition that, because we are all connected, because we are all emerging in –relation, then it matters that I do my best to care for and support others’ becomings.

A third thing that concern, seen in Whitehead’s sense, does is change understandings of knowledge production. This is because the ‘knower’ realizes they are ‘totally dependent for [their] existence upon other, preceding entities’ (Sherburne, 2004: 6). We have already seen that Whitehead establishes relation as the basis of human being: as (Sherburne, 2004: 6) notes ‘to be is to be in relation’. However, as we indicated above (c.f. Tyler), ‘traditional’ curricula pre-exist students; knowledge is perceived to be an ‘external’ body of knowledge, separate from students’ lives and identities. In contrast, co-created curricula enables students themselves to generate the curriculum by the actual occasions of creating, making, inhabiting, and living it. They participate in knowledge-making and creating, not knowledge acquisition or absorption. Using process philosophy to conceptualise curriculum enables a focus on curriculum as an unfolding, continuous and organized grouping of occasions, each specific, distinct in its own actuality, but which together produce the actual world: ‘the actual world is a process and process is the becoming of actual entities’ [i.e. occasions] (Whitehead, 1985: 22). In Whitehead’s terms, the co-created curriculum is an ongoing process of flux and permanence, linked in organic interconnection.
For these reasons, we position concern via acting well in-relation as the second dimension of an ecology of participation. An ecology of participation suggests that curricula co-creation points to an open future. Because not everything is decided in advance (as it mostly is in traditional curricula), students and lecturers have a larger capacity to work collaboratively to foster invention, creativity, and risk. Given Tamboukou’s (2015: 3) view that Whitehead sees ‘creative activity [as] the very essence of each occasion’ then it is important that scope for creativity via participation in curriculum co-creation co-exists with the many performative skills-based and outcomes-focused realities of contemporary higher education. Using ‘concern’ to conceptualise co-created curriculum as an ‘ecology’ places much needed emphasis on finding and making curriculum and pedagogic space for students and lecturers to develop organic practices of acting well in-relation.

3. An orientation to harmony in which difference in equality is valued

In this final section we turn to issues of power, difference and dissent in curriculum co-creation. Matters of power – who has it (or not), how it is used or deployed, how it circulates – are central to participatory modes of learning and teaching which seek to develop curricula through co-creation. In traditional curricula, power operates vertically and hierarchically; power over what is taught and how it is taught lies with the teacher. In contrast, practices of co-creation usually have an explicit goal to unsettle and destabilise these traditional power relations. Power is intimately related to difference and dissent. We often encounter difference and dissent in the classroom, for example, in students talking off task, in failing to turn up for a class presentation, in class disputations over opinions, viewpoints, or theories, and through students’ cliques and in-groups with their exclusionary practices. Here, we want to consider dissent and difference not as a ‘problem’ but as an intrinsic aspect of democratic participation that curriculum co-creation enables. What concepts might Whitehead’s process philosophy offer to help us do this?

The answer to this question, may be found in Whitehead concept of ‘harmony’ and how harmony may support ‘actual occasions’ of equality. Whitehead saw ‘harmony’ as an ideal. Harmony is, as Henning (n.d.) explains ‘the subjective aim of every
occasion’. Harmony, for Whitehead, is an ‘absence of mutual inhibition among the various prehensions’ that constitute an experience. The aim of harmony, then, is at ‘maximally inclusive unity in diversity’ (cited in Henning, n.d.: 2). To illuminate this, we return to our examples, and cite one instance from each:

The end product on the Educational Spaces: Theories and Perspectives module is a web-journal, to which each student posts their final journal article. This is a moment of pride and achievement. Each year, students are consulted about whether their web-journal should be made public and published on the internet, or kept private for viewing just by the class, myself and the external examiner. Each year students vote on this issue and every year the module has been running they have voted by a clear majority to keep the web-journal private. However, one year the whole class, with the exception of one person, voted for it to be made public. The one dissenter was very clear about her reasons for keeping it private: to protect people’s identities in the future when they would be pursuing careers; and because some people’s articles disclosed sensitive, personal information. She put up a robust and reasoned defence in a class debate for her choice. The class heard her out and came to the collective decision that, even though she was in a minority of one, unless they had a 100% agreement with the decision to go public, then the web-journal must remain private.

One Student Engagement course participant was extremely negative about the whole concept of student engagement. He regularly disrupted the group by arriving late, contributing heated monologues on the dangers of student engagement and expressing the belief that he was being asked to change everything ‘because change is fashionable’. He concluded ‘I feel the responsibility of totally ignoring the contents of this course’ and stated that he was ‘not willing to try’ any of the student engagement initiatives suggested on the course with his students. Despite my use of a range of teaching approaches that modelled good student engagement and inviting participants to share their experience, this one participant persisted with a very negative and non-negotiable stance. In a later evaluation, this participant commented that what he had found most useful about the course was the ‘presentation by [a] fellow academic emphasizing the fact that implementation of the methods offered by this course can lead to detrimental results’, an interpretation that was at odds with my view that his colleague had presented some excellent examples of how he had adapted his teaching
to enhance students’ engagement. Finally, this participant stated: ‘I found the contents of this course almost poisonous for my practice’.

In both instances, the individual’s intervention puts them at odds with the group. In a traditional curriculum, their dissenting voices might be seen as willfully bothersome, they themselves might be seen as disputatious, and their claims for difference might be castigated as inciting group disunity. Whitehead’s concept of harmony, when allied to curriculum co-creation practices, enables us to see that something else is going on.

Each example is an intervention which demonstrates each student’s attempt to reconfigure the field of experience by bringing into play the agentic power granted them in curriculum co-creation. Bingham and Biesta (2010: 24) suggest that ‘intellectual emancipation happens when a student sets out an orbit that is wholly his or her own.’ Rather than producing conflict, what we can see happening here is that each student is setting out an orbit that is their own as a gambit – as a potential starting point for a new form of equality to emerge, an equality oriented to harmony in which difference in equality is recognized. They feel empowered in doing this by previous occasions of participating in co-creating curriculum. In the first case, the class thought about and accepted the individual’s point and the web-journal was not made public. In the second case, the student’s vehement opposition generated an interesting group dynamic that led to more learning for the class, as group participants responded to the objections with well-reasoned responses using examples, not as a desire to do away with dissent but as a provocation to some very careful thinking about why a particular position might be held. Harmony, then, is not an easy fix. It is not a warm and fuzzy feeling of group identification and unity. In the search for harmony, there is something at stake; indeed, harmony puts us at stake. Harmony as an ideal requires us to ‘make decisions or to take stands/sides on issues of real value’ (Thompson, 2000: 93). Shaviro (2008: 5) explains that when we are faced with a decision on values, the most ‘creative’ choice is that which ‘recognizes “diversities in contrast,”’ and which provide the most practical means to convert the opposition into a contrast’ (348).

What our two examples demonstrate, then, is that, in enabling dissent to have a voice within that curriculum space, each individual and group could be seen as engaging in
curriculum co-creation as a point of departure for the pursuit of equality. Harmony involves negotiating dissent and difference constructively rather than destructively, and links back to an enactment of that sense of ‘concern’ that comes of being in relation to others that we discussed in the previous section. It may be that co-created curricula which put into practice the principles of process philosophy may be effective in supporting the development of what Love (cited in Stout, 2012: 358) calls the ‘integrated individual’, that is, it may be productive in fostering relationally oriented persons for whom interconnection and mutuality go hand in hand with the emergence of authentic, resilient selves. It is for these reasons that we posit an orientation to harmony in which difference in equality is valued as the third dimension of the concept of ecology of participation.

**Conclusion**

This article has explored what Whitehead’s process philosophy offers to a consideration of co-creation of curricula as an always emergent, never finished, relational and ethically experimental process of curriculum-making. We have used aspects of Whitehead’s process philosophy to explore some positive insights and affordances of curriculum co-creation. This is important because, as Barnett & Coate (2005) note, higher education curricula have too often focused on knowing at the expense of acting and being. A process philosophy understanding of curriculum co-creation speaks directly to being and acting, to reason and emotion, to thinking and doing, not as separate acts but as intrinsic to human becomings in-relation. In this, process philosophy offers some powerful challenges to the way we think about humans, nature, mind, and reality. We have drawn on empirical examples to illuminate ways in which process philosophy helps in taking us beyond mind/body, fact/value, self/other dualisms. We have suggested that process philosophy gives us the means to apprehend experience as integrated, and curricula as an emergent and contingent set of processes and practices not as disembodied ‘content’ which is ‘sequenced’ into a containable scheme of knowledge, or as a technicist apparatus for learning.

The conceptualisation of curriculum co-creation as an ecology of participation we propose takes inspiration from aspects of Whitehead’s thinking and leans on
Morriss’s (2002: 571) view that ‘an ecological paradigm recognizes integration with the world and others’. We have developed the concept of ecology of participation to refer to the dynamic, processual nature of relationships, interactions and events which initiate and sustain curriculum co-creation in particular temporal and spatial locations and pedagogic networks, and suggest that curriculum co-creation as an ecology of participation has three interlinked dimensions. These are:

- a process of becoming which recasts subjectivity;
- acting well in relation which enacts concern; and
- an orientation to harmony in which difference in equality is valued.

The article presents various arguments concerning the utility and value of the concept of ecology of participation. These include: greater scope for individuals to act as educational actors; a greater role for collaboration, sociality and for the mutual constitution of action and meaning within curriculum assemblages; innovative, creative and risk-taking pedagogic practices for producing knowledge; and a vision and practice of curriculum-making as an embodied, ethical and relational practice. We hope that particular ecologies of participation can foster conditions for well-being, care and interconnectedness in ways which contest individualized, instrumental, marketised, neoliberal regimes in higher education. If they can, then the possibilities for a transformed view of higher education curriculum are compelling, the possibilities for learning are enormous.

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