

An ontological turn for higher education

Gloria Dall'Alba^{a*} and Robyn Barnacle^b

^a *University of Queensland, Brisbane, Australia;* ^b *RMIT University, Melbourne, Australia*

Abstract

In this article, the implications of foregrounding ontology for teaching and learning in higher education are explored. In conventional approaches to higher education programs, ontology has tended to be subordinated to epistemological concerns. This has meant the flourishing of notions such as transfer and acquisition of knowledge and skills, either generic or discipline-specific. The authors challenge this emphasis on what students acquire through education by foregrounding instead the question of who they become. They do this through a theoretical/conceptual exploration of an approach to learning that undermines a narrow focus on the intellect by promoting the integration of knowing, acting and being.

Keywords: higher education; ontology; learning

*Corresponding author: Dr Gloria Dall'Alba, School of Education, University of Queensland, Brisbane Qld 4072, Australia. Email: g.dallalba@uq.edu.au

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1. Challenges to conventional university programs

In the higher education research literature during the past decade, the idea and role of the university has featured prominently. While this issue is by no means new (e.g., Jaspers, 1960; Ortega y Gasset, 1944; Reeves, 1988), it has received renewed attention. Several researchers have noted a changed role for the university, challenging current conceptualisations of what a university is or should strive to be (e.g., Barnett, 1997, 2000, 2005; Bowden & Marton, 2004; Coffield & Williamson, 1997; Delanty, 2001; Dall’Alba & Barnacle, 2005; Gibbons et al., 1994; Readings, 1996; Slaughter & Leslie, 1997). The fragmentation of the university in line with hyper-specialisation, a focus on knowledge rather than learning, and the largely instrumental function universities are seen to have within contemporary societies are among the points of contention identified.

Current critiques of higher education typically raise issues previously identified by Martin Heidegger, who questioned the way in which we “increasingly instrumentalize, professionalize, vocationalize, corporatize, and ultimately *technologize* education” (Thomson, 2001, p. 244; emphasis in original). These trends within contemporary universities can be seen in an emphasis on ‘quality assurance’ and accountability (for instance, in throughput measures such as completions); increased marketing of university programs locally, nationally, and internationally; and areas of study showing strong student demand or attributed high status.

In parallel with challenges to the idea and role of the university, an emphasis on transfer and acquisition of knowledge and skills in university programs has been extensively questioned. The epistemology underlying such an emphasis has been demonstrated to be fundamentally flawed (e.g., (Billett, 2001; Bourdieu, 1977; Chaiklin & Lave, 1993; Dall’Alba & Barnacle, 2005; Dall’Alba & Sandberg, 1996; Giddens, 1984, 1993; Lave, 1993; Schön, 1983; van Manen, 1977). Within this epistemology, knowledge and skills are seen as attributes that can be decontextualised from the practices to which they relate. For instance, anatomy and communication skills are often taught as self-contained components of a medical program. Such trends are also evident within research degrees, which have until recently remained somewhat insulated from the generic capabilities push, but where attention has now turned to including generic skills programs. While there are exceptions to conventional curriculum design, programs emphasising knowledge and skills acquisition remain prevalent. Their design raises the question of how such knowledge and skills are to be integrated into skilful practice or, more broadly, contribute to the transformation of the learner, as we argue below.

As a further challenge to decontextualised knowledge, the notion of knowledge as foundational and absolute has been vigorously contested (Grosz, 1995; Gibbons et al, 1994; Lave, 1993; Schön, 1983). A transformation and pluralisation has occurred, such that knowledge has come to be seen as situated and localised into various 'knowledges' that are socially constructed in relation to specific knowledge interests. This transformation and pluralisation further calls into question the notion of an unproblematic knowledge transfer or acquisition.

While an emphasis on knowledge transfer or acquisition has been challenged epistemologically, there is also considerable empirical evidence that such an emphasis is inadequate in promoting student learning (Brockbank & McGill, 1998; Brown & Glasner, 1999; Ramsden, 2003; Walker, 2001). This is because a focus on knowledge, rather than learning, treats learning as unproblematic. More particularly, students are not assisted and supported in situating and localising knowledge within specific manifestations of practice. A focus on knowledge acquisition leaves to students the difficult task of integrating such knowledge into practice.

Not only have the nature of knowledge and knowledge transfer been challenged, but knowledge as the focus of higher education has come into question, albeit a conventional notion of knowledge (e.g., Barnett, 2000, 2004; Bowden & Marton, 2004; Dall’Alba, 1998; Dall’Alba & Barnacle, 2005; Dall’Alba & Sandberg, 1996). Consistent with foregrounding knowledge, an over-emphasis on a narrow conception of the intellect is evident in many higher education programs (Barnett, 1997; Dall’Alba & Barnacle, 2005).

In contrast to the emphasis on the intellect in conventional higher education programs, the embodiment of knowledge has received renewed attention in epistemological debates and empirical research. For instance, the centrality of the embodiment of knowledge and the ‘lived body’ have been identified in professional practice (Dall’Alba & Sandberg, 2006; Mol, 2002) and in body-technology relations (Dall’Alba & Barnacle, 2005; Heidegger, 1993/1978; Ihde, 2002), while feminist researchers have highlighted the

gendered nature of the embodiment of knowledge (Grosz, 1995). While some attention is being paid to the embodiment of knowledge as it relates to children and teenagers in schools (see, for example, Bresler, 2004), little research on higher education has highlighted its importance. It is evident that a focus on the intellect in conventional higher education programs overlooks the key role of the lived body and, more specifically, the embodiment of knowledge, or knowing.

This paper draws together aspects of these debates in exploring an alternative, ontological conceptualisation of learning for higher education programs. Educational approaches that focus on the intellect render irrelevant or invisible the necessary commitment, openness, wonder, or passion that are integral to learning or to taking action, more broadly. These are among the dimensions of learning that we believe need to be revitalised through an ontological approach to higher education programs. Here we present a theoretical/conceptual account of the role of ontology in these programs. Our approach offers a way forward for higher education by re-asserting the ontological implications of learning, which in the past have tended to be subordinated to epistemological concerns.

2. Knowing and being are interdependent

Our point of departure is Heidegger's insight that the problems faced by higher education, such as those outlined above, are ontological. Iain Thomson, enunciating

Heidegger's position, argues there is an essential link between education and ontology, in that our approach to the latter will be reflected in how we treat the former:

When our understanding of what beings *are* changes historically, our understanding of what 'education' *is* transforms as well (2001, p. 248; emphasis in original).

Heidegger addresses ontological questions phenomenologically or, in other words, through attending to our everyday being in the world. This reveals that our mode of being in the world is that of dwelling with and amongst things and others. While this may sound in some respects obvious, according to Heidegger it is an obviousness that has been lost to us since ancient Greek times. What it means is that we don't primarily access things conceptually or intellectually but, instead, through being constantly immersed in activities, projects and practices with things and others. We organise entities and creatures within these projects: breed livestock and prepare food for our families, for example. We also alter or construct things, such as fell trees and build houses, or re-orient streams and rivers. To be this way requires that we are open to the possibilities of things – the qualities of timber or fresh produce, for example, and what those qualities enable. Things, in turn, need to be receptive to our manipulations. Heidegger calls this our situatedness, 'always already' open to the possibilities of being (see *Building, Dwelling Thinking*, 1993/1978). Because we are also historical creatures, however, the way things appear to us—what we consider things to be and what they can be used for—is informed by the parameters of intelligibility that are inherent in growing up in a particular social and historical context.

Knowing, or how we understand the world, thus arises on the cusp between the history of being—or how being has been thought in the past—and the possibilities of being that are opened up in our everyday practices, projects and activities. In other words, what is—including how things become what they are—and what we know are mutually dependent: ontology and epistemology are inseparable. For Thomson:

Our very 'being-in-the-world' is shaped by the knowledge we pursue, uncover, and embody. [There is] a troubling sense in which it seems that we cannot help practicing what we know, since we are 'always already' implicitly shaped by our guiding metaphysical presuppositions. (Thomson, 2001, p. 250)

If being and knowing are inextricable, then exploring this interdependence provides a means of not only problematising but also transforming higher education. Knowing is inhabited; we cannot step outside it. But it is also transformative—it can change who we are.

In contrast to the Heideggerian account described above, representationalist models have dominated accounts of what it means to know since the enlightenment. The tendency persists to think of the things that inhere in the world—entities and materiality broadly—as passive receptacles for, or products of, thought or discourse. In such an approach, materiality is always thought of as subject to, rather than productive of, signification. While it has been the subject of critique for some time, particularly within the spectrum of Continental philosophy, representationalism endures. But we need not accept this. For example, Karen Barad challenges such models in asking:

What compels the belief that we have a direct access to cultural representations and their content that we lack toward the thing represented? How did language come to be more trustworthy than matter? Why are language and culture granted their own agency and historicity while matter is figured as passive and immutable?... How does one even go about inquiring after the material conditions that have led us to such a brute reversal of naturalist beliefs when materiality itself is always already figured within a linguistic domain as its condition of possibility? (2003, p. 801)

Alternative accounts of knowing can be mobilised by challenging the idea that mind and reason occupy a privileged and detached stance in relation to the body and world, more broadly. Where a conventional account of knowing has treated it as restricted to an ideal realm of thoughts, ideas and concepts, we want to situate knowing within the materiality, and spatial and temporal specificity, of being-in-the-world. In other words, knowing is not reducible to thought or the discursive. Instead, knowing is always situated within a personal, social, historical and cultural setting, and thus transforms from the merely intellectual to something inhabited and enacted: a way of thinking, making and acting. Indeed, a way of being.

In putting forward this argument, it is not our intention to dismiss formal knowledge or to suggest that learning of this kind should be abandoned. Rather, what needs to be recognised, in our view, is that formal or propositional knowledge and the informal kind of knowing that emerges out of being-in-the-world are interrelated. Hubert Dreyfus (2004) makes a similar point by arguing that an embodied directedness to the world not only forms the basis for all formalised propositional knowledge, but that the emergence

of new ideas and new ways of doing things is dependent on a less codified, embodied, engagement with the world.

Although ontological issues of the kind explored here have not previously featured prominently in debates about the state of higher education, attention is now being paid to the ontological nature of the problems being faced (Barnett, 2000, 2004, 2005; Dall’Alba & Barnacle, 2005). Ronald Barnett (2004, 2005) speaks of a need for an ‘ontological turn’ in teaching within higher education, while acknowledging that epistemology is not thereby entirely displaced. He argues that “instead of knowing the world, being-in-the-world has to take primary place in the conceptualizations that inform university teaching” (Barnett, 2005, p. 795). In line with Heidegger, Barnett proposes that an ontological turn of this kind offers a way forward for higher education institutions. Below we explore what it means to explicitly incorporate ontology in this way through a reconceptualised notion of learning.

3. Reconceptualising learning

The broader conceptualisation of higher education that we explore here has the potential to transform the notion of learning in higher education, as well as the way in which such learning would be promoted and realised within higher education institutions. Knowledge remains important, but the focus is no longer knowledge transfer or acquisition. Instead, knowing is understood as created, embodied, and enacted. In other words, the question

for students would be not only what they know, but also who they are becoming. Rather than treating knowledge as information that can be accumulated within a (disembodied) mind, learning becomes understood as the development of embodied ways of knowing or, in other words, ways-of-being (Dall’Alba, 2004, 2005).

In our conceptualisation of learning, there is a shift in focus from epistemology in itself to epistemology in the service of ontology (see Dall’Alba, 2005, for elaboration). In other words, learning is not confined to the heads of individuals, but involves integrating ways of knowing, acting, and being within a broad range of practices. For instance, teacher education programs would not only address specific knowledge and skills that teachers need. Such programs would also focus on developing appropriate ways of enacting opportunities and situations *as* educational, that is, developing ways of being skilful teachers such that student learning is enhanced. Similarly, for medical students, learning to know sicknesses and symptoms, in an embodied sense, would contribute to developing appropriate ways of acting towards patients, their friends and family, as well as relevant authorities and so on, in a manner that promotes improved health for patients. In other words, the focus of medical programs would be developing appropriate ways of being medical practitioners, in contrast to simply acquiring and applying knowledge of relevance to medicine. Rather than the current focus on generic skills in research degree programs, undertaking a doctorate would be understood as learning ways of being that are appropriate to research within a particular field or discipline (Barnacle, 2005). This recognises that practices of knowledge production, including how knowledge is organised and generated, are contingent upon traditions of knowledge. Becoming a

researcher involves entering into these ways of thinking, acting and being. It is precisely because ways of thinking etc become inhabited that it can be difficult to challenge familiar frames of intelligibility.

While we argue for a focus on developing ways of being in higher education programs, this does not mean social engineering in which all ‘products’ of a higher education program should, or could, be identical. Such a proposal contrasts sharply with our position. Rather, by virtue of the fact that they are educational enterprises, higher education programs promote—directly or indirectly—particular ways of knowing, acting and being. As these programs have an educative role, the development of appropriate ways of being, acting and knowing is, arguably, defensible.

What, then, would a focus on developing ways of being mean for higher education? Heidegger (1998/1967a) points to the original meaning of the German word, *Bildung* (education or formation), as “turning around the whole human being. It means removing human beings from the region where they first encounter things and transferring and accustoming them to another realm where beings appear” (p. 167).¹ First, we note Heidegger’s emphasis on ontology, that is, *being-in-the-world*. Second, we see an inevitable embeddedness within the surrounding world, that is, *being-in-the-world*. Third, Heidegger is critical of thought that “may be levelled out into the uniform storage of information and as such made useful for the inevitable planning needed by a humanity

¹ Heidegger (1998/1967a) indicates the kind of education or formation he is proposing through a reinterpretation of Plato’s ‘allegory of the cave.’ By ‘turning around the whole human being’ there is an awakening to the ‘realm where beings appear’ in their unconcealed form.

under control” (Heidegger, 1998/1967b, p. xiii). The alignment of such thought with an increasingly instrumentalised higher education is evident in the trends we noted earlier.

Fourth, Heidegger makes clear that he does not mean:

...merely pouring knowledge into the unprepared soul [or mind] as if it were some container held out empty and waiting. On the contrary real education lays hold of the soul itself and transforms it in its entirety by first of all leading us to the place of our essential being and accustoming us to it.
(1998/1967a, p. 167)

As we discussed earlier, for Heidegger, the way that things appear—what we think things are and what we do with them—emerges through our being-in-the-world. It is the role of education to re-engage us with this process. In other words, according to Thomson, education serves “to bring us full circle back to ourselves, first by turning us away from the world in which we are most immediately immersed, then by turning us back to this world in a more reflexive way” (2001, p. 254).

What are the means at our disposal for bringing about such a transformation within higher education? Some of the means at our disposal are evident in the nature of the transformation itself. In other words, the *how* and *what* of education are consistent. Heidegger’s description of ‘*Bildung*’ points to one means for achieving such transformation, namely, “removing human beings from the region where they first encounter things.” This would mean creating space and opportunities for students to encounter the familiar in unfamiliar ways. Through the strange and unfamiliar we engage with difference: the possibility that things could be otherwise. In other words, by

considering the taken-for-granted from other perspectives, we can develop new ways of dealing with our world. In a similar vein, Barnett argues for presenting ‘awkward spaces to and for students’ (2005, p. 795) in order to enable them to deal with the ‘strangeness’ they inevitably encounter in an uncertain and unpredictable world.

A second means at our disposal is also evident in Heidegger’s description of the kind of education for which we should strive, namely, “leading us to the place of our essential being and accustoming us to it.” Note, first, that our essential being, for Heidegger, is not something fixed, immutable and eternal, but instead, is simply our *way* of being—it refers to how we are rather than what we are. The implication, therefore, in the words of Thomson, is that: “Genuine education leads us back to ourselves, to the place we *are*”, it teaches us to dwell there, transforming us in the process (op cit, p. 254, italics in original). He describes this as ‘receptive spontaneity [that] Heidegger will simply call *hearing* or *hearkening* (*hören*), that is . . . , an attentive and responsive way of dwelling in one’s environment” (p. 256). Heidegger elaborates this idea when he says: “To learn means to make everything we do answer to whatever essentials address themselves to us at a given time” (1968, p. 14).

The notion of ‘receptive spontaneity’ appears to resonate with a central task and challenge that Barnett identifies for the contemporary university in an uncertain world. This task consists of enabling students to develop “the capacity to cope, to prosper and to delight in [such] a world” (2005, p. 794). Students are not only to learn to tolerate strangeness in an uncertain world, but also to produce it, “for, ultimately, the only way,

amid strangeness, to become fully human, to achieve agency and authenticity, is to have the capacity to go on producing strangeness by and for oneself” (ibid, p. 794). In Heidegger’s terms, this would mean having the capacity to disclose new worlds, or to engage with beings in new and appropriate ways. Clearly, such a task will not be realised simply through knowledge transfer or acquisition. Instead, the integration of knowing, acting and being is essential to its realisation.

Not only are opportunities for developing receptive spontaneity and for encountering the familiar in unfamiliar ways necessary for students, but also for university teachers and, arguably, higher education institutions as a whole. In order to be attentive and responsive to the needs of students, teachers in higher education must turn away from immediate demands to reflexively examine the what and how of university teaching. What is its goal and purpose in relation to students and contemporary society? How can this goal and purpose be achieved in meaningful and responsive ways?

An ontological turn has the potential to offer a way forward that enables teachers to address current concerns about higher education in line with receptive spontaneity. As Heidegger points out, such a response necessitates ‘dwelling in one’s environment’ in order to ‘answer to whatever essentials address themselves to us at a given time.’ Making university teaching ‘unfamiliar’ in this way is crucial to its renewal (Dall’Alba, 2005). Barnett, too, recognises this need in advocating critical professionalism among university teachers (1997, p. 132).

Similarly, higher education institutions are in need of continual renewal in order to adequately ‘answer to whatever essentials address themselves to us at a given time.’ In exploring new responses to the current instrumentalisation and technologisation of higher education, a reflexive turn is essential. As Barnett argues:

A climate of collective self-criticality has to be developed as a continuing feature of university life. If a university is to fulfil its responsibilities as a ‘university’ to the world by offering a space for strangeness, it needs also to accommodate to strangeness in its own midst, especially a continuing strangeness about itself. (2005, p. 795)

We argue, then, for a revitalisation of higher education in order to address the kind of concerns outlined in the introduction to this paper. In our view, an ontological and reflexive turn is needed to adequately address these concerns at all levels of higher education institutions. More specifically, we argue for a shift in focus from knowledge transfer or acquisition to ways of being. Continually and thoughtfully monitoring and evaluating the extent to which we bring about such a shift is a necessary feature of its achievement if higher education institutions are to demonstrate responsive spontaneity.

4. Implications for higher education programs

If we conceptualise knowing and learning in the ways outlined above, what implications does this have for higher education programs and, more specifically, for enhancing teaching and learning? An ontological turn provides a way of addressing a number of

shortfalls in current higher education programs. These include: de-contextualisation of knowledges from the practices to which they relate, emphasis on a narrow conception of knowledge rather than learning, over-emphasis on the intellect, and a focus on epistemology at the expense of ontology.

We argue above that epistemology must be in the service of ontology in higher education programs. The task is incomplete with mere knowledge acquisition. Instead, higher education programs need to re-orient their focus by assisting students to integrate knowing, acting and being. In so doing, emphasis is placed on learning and its enhancement, not on knowledge in itself.

While such a shift includes enacting practice, it does not imply a focus on skills acquisition (see also van Manen, 1977). As Nigel Blake and colleagues note, a common propensity to reduce a range of human abilities and qualities, such as teaching, communicating, and parenting, to ‘skills’ or ‘competencies’ overlooks the engagement, commitment and risk involved: “what are commonly called skills are not activities to which we give anything of *ourselves*” (2000, p. 26). Indeed, without commitment, or caring about the outcome, the development of important skills, like those above, is unlikely to occur at all. In other words, a narrow focus on skills undermines skilfulness itself because it fails to integrate knowing, acting and being.

Similarly, our notion of learning does not simply imply learning by doing. As Pirkko Markula points out, “the engagement in bodily practices or promotion of bodily practices

does not alone guarantee the construction of an embodied subjectivity” (2004, p. 74). At the same time, Minette Mans points out that “bodies in performance always enfold and reveal diverse histories of gender, social status, kinship, ethnicity and power as well as the bodily experience” (Mans, 2004, p. 79). These complex interrelationships are inevitably incorporated into an integration of knowing-acting-being, including the opportunities, diversity, prejudices, and limitations that the interrelationships entail. Developing awareness of these interrelationships among students and teachers while promoting the integration of knowing, acting, and being is part of the task of higher education.

If a shift in focus from knowledge and skills to the development of responsive ways of being is to be achieved, it would need to permeate higher education programs. This means that such a focus would be explicit in aims, curriculum design, pedagogy, assessment of student learning, and evaluation of teaching and courses. Such a focus would address both the requirements of educating individuals and preparing them for making a contribution to society. It embraces, then, both the educative and social functions of higher education. In so doing, it has the potential to provide a constructive basis for collaboration with stakeholders and other organisations beyond the university, such as employer organisations and professional bodies.

In order to achieve a shift in focus to developing ways of being, what it means to be(come) a teacher, artist, physicist, historian, engineer, architect, and so on must be a central and ongoing question that continues to be addressed explicitly throughout (and

beyond) higher education programs. Becoming is, by definition, never complete. Instead, what it means to be(come) a teacher etc is dynamic and changing over time with developments in practice and the place of particular forms of practice in society, more generally. Hence, perpetually becoming in this way requires openness. There is a need to ‘answer to whatever essentials address themselves to us at a given time’ if we, and our students, are to remain abreast of changes impacting upon practice. But this is not simply a matter of remaining up-to-date. Instead, learning to be(come) a teacher, physiotherapist and so on, involves transforming or ‘turning around’ the self, as Heidegger pointed out. It is not only a question of epistemology but, more particularly, of ontology.

An outline or description of ways of being that is helpful at the program level would need to be directed to the practice in question, rather than generic graduate attributes or capabilities. For instance, there would be a need to integrate ‘critical thinking’ or ‘effective communication’ into ways of being that are appropriate for particular practice. Knowing when and how to draw upon particular knowledge and skills in specific situations is a necessary component of such integration, but it is not sufficient. There is also a need to engage with ways of being embedded within traditions of practice. However, as noted above, practice itself evolves and becomes renewed over time. It is continually reproduced and renewed, so that higher education programs must demonstrate responsive spontaneity.

Given the dynamic and complex nature of practice, there are multiple ways in which it is enacted (see, for example, Billett, 2001; Dall’Alba, 2002; Mol, 2002). This dynamism

and complexity presents a challenge when educating students to engage in practice. At the same time, it provides a means by which the familiar can continually be made unfamiliar. Allowing students to encounter and reflexively dwell in this dynamism and complexity is necessary to promoting attentive and responsive ways of answering to the situations encountered. As Barnett (2000, 2005) notes, enabling students to deal with such dynamism and complexity is a key role of higher education.

While the learning that we advocate involves transformation of being, which is itself no straightforward task, teaching for such ends may be even more challenging. Heidegger argues that teaching is more difficult than learning in contemporary universities:

Why is teaching more difficult than learning? Not because the teacher must have a larger store of information, and have it always ready. Teaching is more difficult than learning because what teaching calls for is this: to let learn. (1968, p. 15)²

Letting learn—creating space and opportunities for learning—poses more challenges to teachers than the ‘decanter’ model implied by notions of knowledge transfer. In a similar vein, Robert Gardner points out “how hard it is to teach without sliding into views that exaggerate both one’s own knowledge and one’s students lack of” knowledge (1994, p. 81). Creating space and opportunities for learning demands that we recognise and draw upon the commitment, openness, wonder and passion that are integral to learning. It also requires dealing with the resistance, prejudices, and anxieties that limit learning. Letting

Max van Manen’s (1991) ‘tact of teaching’ also incorporates letting learn, although he does not use this terminology. Thomson (2005) further elaborates Heidegger’s analysis.

learn means that our being in the world is foregrounded, challenged, and transformed.

Such an approach to teaching contrasts starkly with transmission of (decontextualised and disembodied) ‘knowledge’, overloaded curricula, an emphasis on accountability, and de-professionalisation of university teachers. Instead, letting learn requires creatively enacting situations as pedagogical, being open to, and engaging with, the issues encountered, being sensitive to student needs, and promoting self-awareness and reflective practice, with the risks and opportunities that this entails. In other words, letting learn, too, demands a capacity for responsive spontaneity as a means of enhancing the integration of knowing, acting, and being among our students.

Not only does our argument to foreground ontology have implications for higher education practice of the kind outlined above, but such a shift in focus also has implications for research on higher education. Most clearly, in research on teaching and learning, ontology would be addressed as well as epistemology. In addition, policy directions for higher education and assessments of the extent to which higher education institutions are fulfilling their purposes would be re-framed around an ontological agenda.

5. Conclusion

Our aim in this paper was to put forward an argument for an ontological turn in higher education. Our reconceptualisation offers a way forward for addressing key problems

confronting teaching and learning in higher education, as identified in the introduction to this paper. In line with Heidegger's identification of problems facing higher education as ontological, we propose a re-orientation of the higher education project. Such a re-orientation holds the promise of revitalising higher education at a time when a constructive way forward is sorely needed.

An ontological shift means engaging with being-in-the-world differently. As dedicated learning environments, higher education institutions are ideally situated to do this. Not only can they provide a forum for challenging taken-for-granted assumptions, but also promote ways of being that integrate knowing, acting and being. Indeed, educational institutions cannot help but promote ways of being. The question is: are those ways of being conducive to the kind of outcomes both students and society, more broadly, are seeking? We have argued it is not enough for learners merely to understand new concepts or acquire new skills: this does not produce skilful practitioners. Instead, they are to transform as people, to become architects, psychologists, biologists etc who enact ways of being in the world appropriate to the practice in question that are also responsive to changing practice contexts. In other words, we are calling for educational approaches that engage the whole person: what they know, how they act, and who they are.

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