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The PhD ‘Dragon’: Can it Be Tamed and Trained through Dynamic Educational Design?

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#PhD training

#educational design

#completion rates

#interdisciplinary music studies

#dynamic curriculum

Introduction

Some weeks ago, I was deeply involved in an online international PhD seminar at a research school dealing with interdisciplinary music studies. One of the sessions was called 'How to Train Your PhD Dragon', with PhD students from many countries as well as PhD supervisors and higher music education faculty from musicology, music therapy and music performance as participants. My knowledge about dragons is probably somewhat similar to that of my readers and fellow humans: a mysterious and ancient animal we have probably heard about since childhood but have never seen; something big and monstrous and probably also, at least in Western cultures, something dangerous and threatening. My first reaction when invited to this seminar was, to a certain extent, that of surprise. How can the concept and metaphor of a dragon be relevant to a discussion about PhD training in music studies? However, the more I thought about it, the more I understood the association with a dragon. It was initially connected to the size and dimensions of a 3-year PhD study and how it could appear and be experienced by students. It also concerned the fact that the completion rates for Norwegian PhD students in education, the humanities and the arts are deeply worrying. In the 3-year PhD programmes in the arts and humanities, the current completion rate in Norway is approximately 15%, rising to 35-40% after 5 years. Dropout rates are about 25%, and another 25% remain in studies without any completion in sight (Thune et al. 2012, 67). Similar figures seem to be the case internationally, at least in Western cultures (Wollast et al. 2018).

In the discussion referred to above, some of the students talked about their search for the right theoretical base and the excitement of discovering new theoretical bases and concepts, such as a somewhat hesitant move from sociocultural theory to new materialism and posthumanism. Others spoke about their mixed feelings about methodological approaches when presenting ongoing work to new audiences and fellows, while some spoke about academic lives in isolation, where they were more or less on their own or locked in a kind of supervisory professorial kingdom. Coming from the field of curriculum design and educational design research (e.g. McKenney and Reeves 2018), I was surprised that no one mentioned the significance of the *design* of their ongoing studies, the content, shape and role of what they referred to as the mandatory course part (in most cases, 30 ECTS) and the relationship between the mandatory in their PhD training and their final written thesis or artistic results in the research part.

In this article, inspired by the session on the training of PhD dragons referred to above, I reflect on the meaning, role and significance of educational designs in PhD studies, with the aim of raising some about 'taming' the dragon, as well as inviting readers to reflect on their own experiences of such studies as students and/or supervisors. [1]

What Is Meaningful Educational Design?

Before turning to a discussion about the design of PhD studies, let me briefly elaborate on what meaningful *educational design* is to me. Dictionaries usually define 'design' as a scheme, a plan or an outline, often referring to art or an intention 'to act in some particular way' (Online Etymology Dictionary 2020). In my academic environment (arts education), I very often encounter an understanding of 'design' as something structural with certain qualities (i.e. a concept) that first and foremost can be used to describe the different parts of a unit, object or process, and its respective qualities. As such, the meaning appears to focus on something *static*, supporting our need to understand how our conception of something holistic can be conceived as different parts. The American John Dewey used the concepts of the holistic and something partial to describe the difference between human 'experience' and 'an experience' in his famous

1934 book *Art as Experience*, in which he attributed completely different qualities to just 'experiencing' and 'having *an* experience' (Dewey 1934). I think Dewey's intention in so doing was not only to focus on the holism or qualities of what he called '*an* experience' but rather to focus on the *relationship* between the different parts, understood as the specific relationships that make us experience something as holistic and not fragmented or disconnected. Such logic is only possible if one thinks of design as a *dynamic* concept – one where the different parts of something have specific qualities and roles and where the parts interact dynamically as they enfold as well as in the way they become conscious in our experience. Educational design, therefore, is most meaningful to me when it is conceived of as a *dynamic* concept – that is, a concept used to describe, analyse or plan *how parts function or may function* as a part of a meaningful whole. As a *dynamic* concept, educational design is crucial in curriculum design at any level, from kindergarten to PhD studies, such as in the way that a mandatory part of a PhD study functions or should function in relation to other parts of such a study. Likewise, I think that design, as a *dynamic* concept, is crucial in analytic research on educational or artistic *processes*, such as researching how such processes develop, why they develop the way they do or what it is in the process (ideas or episodes) that determines the end result or product.

This aspect of design became very clear to me in my PhD work a long time ago, in which I analysed pupils' compositional processes in music. In a primary school setting, 11-year-olds were given an assignment to compose music together in groups for 60 minutes. A video camera and microphones recorded everything that took place, and my task was to micro-analyse all the videos for all the groups in action. In keeping with the analytic and methodological principles of the microanalysis of educational processes (Erickson 1996), I was able to review the videos over and over again, and I could also listen to and record the final performances and presentations of the music composed as many times as I wished. In this way, I obtained full insight into a complete human working process with a required end result (the performance of the musical composition) and could easily describe several aspects of the process of the groups as well as the end product. During the analysis, the design of the group process, understood as dynamic locomotion of events and actions, became of great interest to me based on a research question about what it is – or rather, '*what kind of actions and events it is that moves, or does not move, the group process forward towards the completion of*' (141).

What I found in my study of 11-year-olds was that the locomotion in the process could most meaningfully be described as an alteration of different and interacting *episodes*. I described some episodes in the group process as 'circle episodes' – episodes consisting of periods in which the actions in the group were moving in a 'circle' and leading nowhere in terms of progress or completion of the task in question. I identified other episodes, which I called 'focus episodes' and described them as periods of peer teaching and leadership from a competent fellow participant and an intensive and collective focus on moving on. Other episodes were called 'breakthroughs', described as episodes when a convincing idea came forward and the performing of parts or the whole piece worked well. Finally, I identified 'blockages' and described them as episodes in which no musical ideas are around, when no one sees any solution to a problem or when personal actions hurt someone (142–48).

Ever since the completion of my PhD, I have wondered whether some of my findings from this scrutiny of 11-year-olds' group composition and design-making processes could be relevant for adults involved in similar, although very different, processes, such as the working process of PhD students. After all, although highly different, the similarities between the two processes are quite striking to me. Both consist of assignments given

or taken on in an educational system with a supervisor or teacher. Both consist of a 'process' leading towards a 'final product or result', and both are in many ways a sort of process in 'design making' for which inputs, ideas, shaping, reflection and production as well as presentation are crucial elements. In my PhD education and supervisory context, I have often witnessed blockages and circle episodes, such as when a PhD student suddenly finds out that the theoretical platform they have established needs to be substituted because it seems outdated but decides not to substitute it, or when academic writing seems to have come to a full stop. I have also witnessed focus episodes and breakthroughs, such as when a PhD student in music therapy, during a long dialogue with a fellow musicology student, suddenly realises that the peer has a solution to an unsolved methodological challenge. However, what still seems a bit of a puzzle to me is the extent to which the educational design of the PhD programme itself plays a substantial role in students' locomotion through the programme and to which the educational design, as such, can play a crucial role in avoiding blockages or circle episodes and benefit from the experience of focus episodes and breakthroughs to such an extent that the programme is not experienced as a dragon. In other words, can the PhD and dragon be tamed by a dynamic educational and curricular design?

The Potential for a Dynamic Curriculum Design of PhD Programmes

Most Norwegian PhD programmes in education or arts and humanities are 3-year full programmes, very often extending over 4 years, where each year has a 25% teaching or project work commitment over the four years. Usually, the research part (equivalent to 150 ECTS) is a thesis in the shape of accepted and/or submitted articles enveloped in a profile document or an artistic result combined with a reflection document. The so-called mandatory course or training part (in most cases equivalent to 30 ECTS) consists of several smaller courses ranging from 5 to 20 ECTS and aims to support the thematic profile of the programme. In education and the humanities, the great majority of the course content is philosophy of science theory in different shapes and formats, where research methodology and research design have a much smaller part. According to the latest evaluation report of Norwegian PhD programmes (Thune et al. 2012), the quality of the programmes was found to be acceptable, but back then, in 2012, the evaluation committee had already pointed to some worrying aspects that later escalated considerably in a negative direction, such as completion rates, as pointed out in the introduction to this article. As a believer in the importance of a dynamic curriculum design at all levels of educational programmes, my intention in the following paragraphs is not to comment on the recommendations in the report referred to above or suggest concrete educational designs for PhD programmes in the arts and humanities but rather to reflect on and discuss what I think needs to be *the rationale for* what I have referred to as a dynamic curriculum design for PhD programmes.

The Significance of an Overarching Rationale

The concept 'has as many meanings as has "design"'. However, a very important aspect of all the definitions is hidden in its Latin root, 'curere', which means 'run or running', indicating that a curriculum in education is something that is in motion, from somewhere to somewhere – a sort of trajectory or a plan for learning along the way. Curriculum design, therefore, is a complex phenomenon, since it needs to take into account that every part of it is in motion, whether it is elements such as academic content, participants, understanding, learning, critique and all the rest of what makes education so complex and fascinating. This complexity is sometimes captured – to my mind, more or less successfully – in different kinds of visual

models that show connections between different components and are often used as analytic tools for curriculum or lesson planning. A meaningful one to me is Deutsch Jan van den Akker's (2010) model, which he described as follows:

> *Our preferred visualization of the ten components is to arrange them like a spider's web … not only illustrating its many interconnections but also underlining its vulnerability. Thus, although the emphasis of curriculum design on specific components may vary over time, eventually some kind of alignment has to occur to maintain coherence. (182)*

The model he suggests contains 10 components, some of which are traditional ones, such as 'aims and objectives', 'content' and 'assessment', but he also highlights other elements of curriculum design that I find very appropriate in a discussion of the educational design of PhD programmes. The overall spider model is shown in Figure 1.

Van den Akker underlines that his model illustrates the many *interconnections*, as well as the *coherence* of curriculum design and – by visualising this in the shape of spider web – also its *vulnerability*, whereby weakness in one component also can affect the quality of the whole curriculum design. Also worth noting are the components called 'materials and resources', 'location', 'grouping' and 'time', which may not be of obvious relevance when discussing the educational design of a PhD programme.[2] What I want to focus on here is the most central, literally speaking, component in Van den Akker's model: *the rationale*. 'The "rationale" (referring to overall principles or central mission of the plan),' Van den Akker argues, 'serves as a major orientation point, and the nine other components are ideally linked to that rationale.' Accepting his argument, what I would like to bring to the PhD table in our context is to try to answer the following question: What could be the overall principles or central mission (rationale) of a curriculum plan and design for *high-quality* PhD programmes in the arts and humanities with the aim *of increasing completion rates*? I will invite a discussion of this question by arguing for the significance of the following three different, but still closely interconnected, overall principles as a rationale for a dynamic curriculum design of PhD programmes in the Arts and Humanities: (1) PhD education should be a relational enterprise, (2) PhD education should be conceived of as education for a craft and (3) PhD education should focus on building the research portfolios of institutions and on impact development.

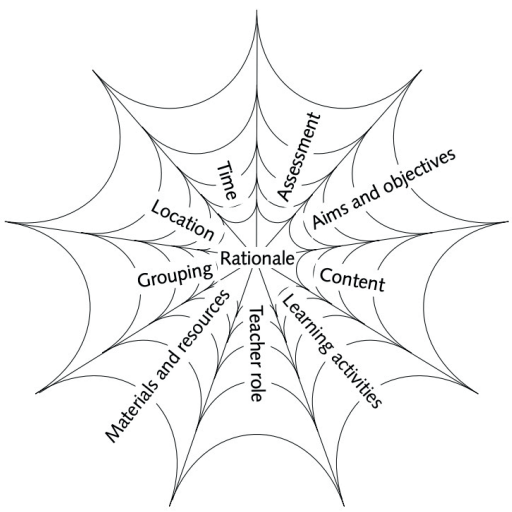

Figure 1. Curriculum spider's web (van den Akker, 2010)

PhD Education as a Relational Enterprise

The focus on relationality as part of academia is certainly nothing new. Relational pedagogy is well established (e.g. Bingham and Sidorkin 2004), as is relational psychology (e.g. Gergen 2009), relational aesthetics (Bourriaud 1997/2002), relational sociology (e.g. Fuhse 2015) and several other sub-disciplines or directions focusing on relational epistemology in human life and beyond (Thayer-Bacon 1997). In this context, I find it relevant to draw your attention to relational thinking in existential

philosophy, since a proper rationale for educational design thinking on any level, in my view, needs a major orientation point dealing with basic ontological as well as etymological questions.[3]

The Indian philosopher Joseph Kaipayil (2009) offered what he called 'a complete relationist theory, -ontic relationalism', based on Eastern as well as Western philosophical traditions. He argued that the fact that things, events, humans and non-humans exist in relations, which 'is the very characteristic of reality, both existentially and structurally' (Kaipayil 2009, 9). He defined the core of his philosophy by four basic tenants, summarised below:

1. Being (all that exists) is relational. Relationality (relatedness) is the very characteristic of reality, both existentially and structurally.

2. Reality is irreducibly pluralistic and inescapably unitary.

3. Every entity is a unity. Nothing can exist except as a relational unity of its constituents.

4. The identity of an entity is defined by its relations. These relations include the entity's interrelations (relations among its constitutive elements) and interrelations (relations with other entities).

According to Kaipayil (2009), knowledge is relational because it is the result of the interaction between the knower and the known. He 'makes knowledge relational both in its origin and in its three existential aspects, namely belief, consciousness and truth' (Kaipayil 2009, 43).

By *basing* a curriculum design for PhD programmes on relationalism as a major orientation point, *activating and cultivating inter-connections* between different components of such programme designs should be mandatory for scientific and administrative staff. Based on my own experience, there seem to be few connections between the different courses offered in many PhD programmes and even fewer connections between the professors who teach these courses and the many supervisors engaged in the research part of such studies. Let us imagine, for a moment, a situation for a PhD student who is greatly inspired by phenomenology in the philosophy of science course but who, in his one-to-one-tuition time, is strongly warned by his supervisor to follow such a path in the research part of his study. I am not saying, of course, that a professor should not speak their mind in such a situation, but then doing so needs to be a part of an open discussion or a part of the course in question and shaped as a relational activity whereby critique and solutions are shared. The dangers of what I refer to as *no-connection programmes* is the fact that many students find it very hard to make decisions when many solutions are possible – something that often leads them to spend too much time looking around for the 'right' science theory or research methodology to such an extent that the whole study is experienced as an invincible 'dragon'. Additionally, I would also like to mention that from a relationalist perspective, curriculum design components, such as time, location, grouping and materials and resources, will be as relevant for the students' knowledge building as the content of courses and lectures because they are 'entities' of great significance in learning trajectories so that a PhD student *will be required* to balance their learning journey amid three existential aspects of knowledge: belief, consciousness and truth.

PhD Education as Education for a Craft

As mentioned earlier, the mandatory 30 ECTS portion of PhD programmes in the arts and humanities is most often a mixture of philosophy of science courses and courses in research methodology. In my faculty, the research methodology part is

currently equivalent to 5 ECTS credits, and two philosophy of science courses are equivalent to 10 ECTS credits. Additionally, students can choose (one course) from a wide selection of 5 ECTS courses, from which the great majority are connected to specific aspects of the philosophy of science theory of a theme or discipline(s). A similar structure, and what I would call *an obvious imbalance* of contents, seems to be the case in many Norwegian PhD programmes in the arts and humanities. I have often wondered why.

By suggesting the concept of 'craft' as a major orientation point for the design of PhD programmes, it may seem that I am first and foremost focused on the practical training of a PhD student as a skilled hands-on researcher who is as familiar with research procedures and methods as a professional in this field. True, I have a strong impression that PhD courses are imbalanced concerning the craft aspect of the programmes and that 'reflection' and 'theory' in the mandatory 30 ECTS have a much stronger position than repeated training in dealing with empirical fields and data, research approaches and instruments. Given the increasing growth in the philosophy of science directions and literature and new paradigms in this field, I can understand the PhD programme designers who want to be on top of theory development in their fields and therefore create philosophy of science courses with a little bit of everything. The fact that there is a similar development in the literature on research methodologies adds, in my view, to the risk of theoretical overload in modern PhD programmes. However, interpretations of the word 'craft' are many and not only associated with practical skills. The old Norse word for 'craft' is 'kraptr', meaning strength, wisdom and virtue. Later, the meaning of craft was expanded to include something built and made.[4]

My point here is to remind readers that reflection, discussion and the performance of skills can be, and most often are, two sides of the same coin in any profession (Sennett 2008). Research education in academia is no exception. One might argue, of course, that the craft aspect of PhD training will take place in the research part of the programme under the surveillance of supervisors, preferably after all mandatory training courses have been completed. Given the current 'no-connection' design of many PhD programmes, however, such a curriculum design puts students at risk of meeting an empirical field with an overload of theoretical knowledge, little or no experience of practical research approaches in the arts and humanities and little or no guided training in methods of data gathering, data analysis, interpretation of data and subsequent reflective/discursive academic writing.

With a dynamic curriculum design and a rationale focusing on PhD education as a craft, the chances are much better, in my view, to design PhD programmes in such a way that skills and reflection, theory and practice as well as hands-on empirical experience and theory-based discussion go hand in hand. This can be done and is probably being done in many ways, such as by balancing and integrating the philosophy of science and research methodology courses in the mandatory part of the programme and making 'fat data' seminars mandatory for students, in which data, preliminary texts or artistic research outcomes are shared, discussed and analysed both methodologically and from perspectives found in theories of the philosophy of science.

PhD Education as an Institutional Research Portfolio and Impact Development

In the past 15 years or so, *societal impact*, research-driven universities and higher institutions have become increasingly important for Norwegian policymakers responsible for higher education and research. This international trend has also reached the disciplines of the arts and humanities. Not all of my colleagues, including myself, think that this *policy-driven* development is necessarily a good

idea. However, societal impact is here to stay and has become a decisive factor in university research life in Norway, as in other countries, not least in connection with research applications in which many of the PhD positions in the arts and humanities are created as well as funded. From my arts and humanities colleagues, I often hear critiques of the focus on societal impact and the argument that impact is solely driven by economic indicators advocated by organisations such as the OECD. True as this might be from a dynamic curriculum design perspective, I argue that a greater focus on societal impact could be the very latch key to improving completion rates for PhD students.

From a dynamic curriculum design perspective, societal impact is important because it could increase PhD education connections to real life throughout the entire study period and beyond. This is nothing new in educational theory and practice, of course; for example, it is the very basis for a rationale for curriculum design paying tribute to progressive education, as described many times and long ago by John Dewey (e.g. Dewey 1923). True, Dewey was primarily writing about learning in connection with schools and children, but his main argument was generically concerned with how quality and democratic education could be most effectively developed through social interaction, where any form of education should be considered a process of living and not a preparation for future living (Williams 2017). As I see it, such a rationale is as relevant for PhD programmes as for schools at other levels. In a recent article (Muhonen et al. 2020), the authors discussed the nature of societal impact in social sciences and humanities (SSH) research contexts. Building on Spaapen and van Drooge's (2011) concept and description of 'productive interaction' and a narrative meta-analysis of impact cases within European SSH, they developed and discussed in depth a typology of 12 different 'impact pathways' for research institutions and research environments. Some examples were the 'collaboration' pathway, the 'anticipating anniversaries' pathway, the 'seize the day' pathway and others (Muhonen et al. 2020, 40–41).

As described earlier in this article, the curricular design of PhD programmes in the arts and humanities currently seems to exist in a rather static form of curriculum design, dominated by non-connected courses in the philosophy of science. Productive interactions with society, in a broad sense – and therefore, in my view – seem to be a rather distant and unreachable goal. True, some PhD students in the Norwegian university and higher education environment of the arts and humanities are involved in some way in externally funded research projects dealing with 'productive interactions' with society – research projects that have created and budgeted their positions. However, even if this seems to be an increasing trend in many Norwegian arts and humanities environments, it is certainly more of an exception than anything else. To me, the combination of a systematic institutional policy and a dynamic

PhD curriculum design with the goal of building a portfolio of productive societal interactions through the use of many and different 'impact pathways' (Muhonen et al. 2020) seems like a form of impact ideally designed for the arts and humanities. PhD students – this group of very resourceful young people – should be looked at as crucial to building an institutional research portfolio with strong links to cultural and artistic life, their institutions and professionals. I really think that such institutions need these kinds of productive interactions with research environments in higher education. However, to achieve such a goal, the professionals and institutions need to be invited and included into the very midst of PhD programmes and not only be regarded as potential future workplaces and future colleagues, but as participants in a dynamic curriculum design with opportunities for discussions about potential research projects as well as the funding, organisation, implementation and impact of such projects for society at large.

Concluding Remarks

In their call for papers on this issue of *Cubic*, the editors referred to the doctorate as the 'new normal, the benchmark qualification, against which all others are awarded'. They continued by saying, 'And, although classified as the highest degree awarded in tertiary education, it remains the least regulated'. I cannot support or argue against such a strong statement. What I can say, however, is the following: Curriculum design does not seem to have much focus on evaluations or debates concerning the function of the different elements of PhD programmes beyond descriptions of its parts, its criteria and guidelines describing what is expected from an individual finally in possession of a doctorate. What I have tried to reflect on in this article is what it would mean to bring the concept of design to the PhD discussion table in the shape of what I call a *dynamic* curricular design. I have focused on the overarching rationale for such design thinking, arguing that the future generation of researchers in the arts and humanities deserve programmes with three major orientation points: keywords described as 'relational enterprise', 'craft education' and 'portfolio and impact development'. Whether such a rationale can solve the challenge we refer to as completion rates remains to be seen. To be frank, it does not bother me too much, as long as students can describe their PhD lives in somewhat the same way as one of the students expressed himself in the research school session, which served as my inspiration for writing this article. 'I don't care,' he said eagerly, whether this dragon can be tamed or not, as long as I can combine my ongoing artistic research work and performance in the concert hall with my reading of the new philosophy of science. It's so exciting!

Notes

1. My background beyond supervision and research school activities in PhD studies in Norway is limited but has included experience both as a PhD student abroad and as an examiner or opponent in several other countries, as well as taking part in a comprehensive national evaluation of PhD studies in pedagogy and music education in Sweden.

2. I think they are currently very relevant, especially if we focus on completion rates or post-humanist science theory, such as sociomaterial theories in education (e.g. Fenwick and Nerland 2014). However, such a discussion needs to be a topic for a different article.

3. For readers interested in the relationship between relational pedagogy and my field of music education, see Holdhus, Kari and Marianne Espeland, "Music in Future Nordic Schooling," *European Journal of Philosophy in Arts Education* 2, no. 2 (2018): 85–118.

4. For readers interested in the concept of craft in relation to academic disciplines, see Holdhus, Kari, Marianne Espeland, and Regina Murphy. (eds), *Music Education as Craft: Reframing Theories and Practices* (Springer, 2021)

Bibliography

Akker, Jan Van Den. 2013. "A European Perspective on Curriculum Development and Innovation." In *Curriculum Innovations in Changing Societies*, edited by E. H. Law and C. Li. Sense Publishers. https://doi.org/10.1007/978-94-6209-359-1_30.

Bingham, Charles, and Alexander M. Sidorkin, eds. 2004. *No Education without Relation* . Peter Lang.

Bourriaud, Nicolas. 2002. *Relational Aesthetics*. Presses du réel.

Brownlee, Joanne, and Donna Berthelsen. 2006. "Personal Epistemology and Relational Pedagogy in Early Childhood Teacher Education Programs." *Early Years* 26 (1): 17–29.

Dewey, John 1923. *Democracy and Education: An Introduction to the Philosophy of Education*. Macmillan.

Dewey, John 1934. *Art as Experience*. Minton, Balch, and Company.

Erickson, Frederick. 1996. "Ethnographic Microanalysis." *Sociolinguistics and Language Teaching*: 283–306.

Espeland, Marianne. 2007. "Compositional Process as Discourse and Interaction: A Study of Small Group Music Composition Processes in a School Context." HSH.

Fenwick, Tara, and Monika Nerland. eds. 2014. *Reconceptualising Professional Learning: Sociomaterial Knowledges, Practices and Responsibilities*. Routledge.

Fuhse, Jan. A. 2015. "Theorizing Social Networks: The relational sociology of and around Harrison White." *International Review of Sociology* 25 (1): 15–44.

Holdhus, Kari, and Marianne Espeland. 2018. "Music in Future Nordic Schooling." *European Journal of Philosophy in Arts Education* 2 (2): 85–118.

Holdhus Kari, Marianne Espeland, and Regina Murphy, eds. 2021. *Music Education as Craft: Reframing Theories and Practices*. Springer (forthcoming).

Gergen, Kenneth J. 2009. *Relational Being*. Oxford University Press.

Kaipayil, Joseph. 2009. *Relationalism: A Theory of Being*. JIP Publications

Mitchell, Stephen A. 2014. *Relationality: From Attachment to Intersubjectivity.* Routledge.

Muhonen, R., P. Benneworth, and J. Olmos-Peñuela. 2020. "From Productive Interactions to Impact Pathways: Understanding the Key Dimensions in Developing SSH Research Societal Impact." *Research Evaluation* 29 (1): 34–47.

Online Etymology Dictionary. Accessed December 19, 2020. Url: h search?q=design&ref=searchbar_searchhint.

Sennett, Richard. 2008. *The Craftsman*. Yale University Press.

Spaapen, Jack, and Leonie van Drooge. 2011. "Introducing 'Productive Interactions' in Social Impact Assessment.' *Research Evaluation* 20 (3): 211–18.

Thayer-Bacon, Barbara J. 1997. "The Nurturing of a Relational Epistemology." *Educational Theory* 47 (2): 239.

Thune, Taran Mari, Svein Kyvik, Sverker Sörlin, Terje Bruen Olsen, Agnete Vabø, and Cathrine Edelhard Tømte. 2012. "Ph.D. Education in a Knowledge Society: An Evaluation of Ph.D. Education in Norway." Nifu, Oslo, Report 25/2012.

Williams, Morgan K. 2017. "John Dewey in the 21st Century." *Journal of Inquiry and Action in Education* 9(1): 7.

Wollast, Robin, Gentiane Boudrenghien, Nicolas Van der Linden, Benoît Galand, Nathalie Roland, Christelle Devos, Mikaël De Clercq, Olivier Klein, Assaad Azzi, and Mariane Frenay. 2018. "Who Are the Doctoral Students Who Drop Out? Factors Associated with the Rate of Doctoral Degree Completion in Universities." *International Journal of Higher Education* 7 (4): 143–56.

Bio

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