The New Practitioner: Transcending Disciplinary Boundaries

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Abstract

In this opinion paper we introduce a school-wide concept at doctoral level aimed at professional practitioners, who wish to stay in their respective areas of work. The rationale behind this school-wide concept is that in Hungary, where its implementation is currently in progress, gaining a PhD automatically means becoming an academic. However, there is a significant demand amongst high-performing professional practitioners, who are not inclined to become academics, for further learning opportunities at the highest level. They are our target market. We also wish to respond to one of the current challenges the academy is globally facing, namely to maintain the highest scholarly standard while achieving high relevance for practice. The school-wide concept that can adequately engage with both of these problems is naturally a work-based one. Thus what we outline here is a professional doctorate in a school-wide context. We frame this new approach based on three principles: Popper’s tentative problem solving process, Nicolescu’s method of transdisciplinarity, and Bourdieu’s approach to reflexivity. From these three principles we have synthesised a transdisciplinary tentative process of creative problem solving, which is both reflexive and reflective. We bring this process into the foreground and build a knowledge landscape in the background. The taught components (content) of the knowledge landscape are delivered by the disciplines involved in the form of high-level meta-knowledge. Since there are two focal dimensions of the programme content, we label it bifocal. The enquiring practitioners, who are also passionate learners, will make their journey through the professional doctoral school. They will follow their own transdisciplinary tentative processes of creative problem solving in this bifocal knowledge landscape, which is composed of taught components and additional elements that are to be discovered or created in the community of New Alexandrians.

Keywords: Transdisciplinarity, Tentative Problem Solving, Reflexivity, Meta-Knowledge, Professional Doctorate
Introduction

Our aim in this opinion paper is to introduce a new school-wide concept of doctoral education which is currently in the process of implementation in Hungary. This transdisciplinary professional doctoral school (TPDS) concept is based on three principles: (1) Popper’s (1974) tentative problem solving process, (2) Nicolescu’s (2010) method of transdisciplinarity, and (3) Bourdieu’s (2004) approach to reflexivity. The purpose of the TPDS is to offer a learning opportunity at the highest level for practitioners who want to remain in their respective professional fields but who are curious about what further knowledge and learning could offer them, and who want to enhance their professional performance. We do not claim that the TPDS concept is the only way to design such a teaching-learning process, nor do we claim that it is the best one. However, we do believe that it is a meaningful and viable approach to higher professional education, the implementation of which can serve as an illustrative model and as a basis for further exploration. What we wish to achieve in this paper is to offer a sound rationale for the design approach taken to the TPDS, and invite colleagues to engage in a debate relating to the proper structure of such a programme. This will help us clarify our own thinking, and constructive critiques will help us improve the current concept, and stimulate further discussion that will help inform the debate relating to a better form of education in the world of work-based learning.

It is likely that the practitioners who come to the TPDS will be what Carr (2011) defines as ‘Shallows’. For Carr ‘Shallows’ are those practitioners who have had a lack of specifically focused attention over an extended period of time. However, in this sense Shallow does not mean lacking in knowledge, since it is possible to have shallow knowledge of considerable breadth. These professional practitioners can make use of the latest developments in the disciplines in which they were originally educated and/or which are central to their work (henceforth we call these the native disciplines of the learners). Such current knowledge is often accessed via refresher courses (often in the form of Continuous Professional Development, CPD). The case made here is that these practitioners could also use knowledge from academic disciplines other than their native disciplines (henceforth we call these adjunct disciplines). Even though they cannot be educated from the basics in the adjunct disciplines, since it would take too long, this is not necessary; they can access aspects of the adjunct disciplines to enhance their professional practice. The TPDS offers something new that we
believe can be an attractive additional avenue to the already existing forms of post-experiential education. The essence of the idea is that the learners could improve themselves and their performance in their native disciplines by receiving carefully designed taught components from a variety of adjunct disciplines. These taught components are designed to include high-level concepts that cover some of the fundamental results of a discipline and, like a hologram, in a sense they contain the whole disciplinary perspective in a nutshell. Such concepts we call meta-concepts, and this type of knowledge we call meta-knowledge. Following Prusak and Davenport (2003), we believe that the gurus of the various disciplines are capable of enabling us to access and acquire such meta-knowledge.

To make our case, we first outline one of the educational challenges today, to which we claim the TPDS concept offers an effective response. Then we briefly outline the three principles of the TPDS concept, explaining how they together make a framework through which the TPDS concept can be developed and examined. Subsequently we outline the taught components that the learners are presented with. We do not include the detailed description of the particular topics, or of programme design and delivery as we have dealt with these questions elsewhere (see Baracskai, Velencei, Dörfler, & Szendrey, 2011), we only aim at a high-level description of this ‘content landscape’. Then we provide a generic description of how we envisage the journey of the learners through the designed content landscape. Finally, we make some concluding remarks about how the TPDS concept is distinct, perhaps even unusual in the current educational context.

**Scoping the problem: a challenge of post-experiential education**

Nowadays many academics as well as practitioners share the concern that the common output of higher education, namely the graduates with semi-specialised cultivated minds, cannot successfully cope with numerous problems and changing context they face at work. In our view this could be the result of a situation where the balanced, comprehensive knowledge that meant the Universitas in the pre-Modern Era (Dörfler, Baracskai, & Velencei, 2015; Velencei, Baracskai, & Dörfler, 2015b) appears to be disappearing in today’s increasingly specialised higher education. Regardless of the profession and the particular problem to solve, since the specialists are lost in the detail of their specialism, what is often
missing is the ability to see the ‘Big Picture’. One plausible cause of this is that real-life problems defy disciplinary boundaries and therefore require a ‘generalist’ rather than a specialised perspective for achieving comprehensive sensemaking. Therefore, because the increasingly specialised graduates tend to operate beyond their disciplinary scope, their mainstream education does not provide them with the knowledge they need. At the same time, we hear more and more about the lack of relevance in academic research – which we believe to be just another aspect of the same problem: the academy does not engage with the real problems in the world of practitioners.

However, we cannot simply address this challenge through providing deep knowledge from all disciplines to the learners – there is too much of it. Our knowledge is limited by the capacity of our minds, and therefore we cannot achieve deep knowledge of all the disciplines related to a particular problem. Furthermore, the complexity of the knowledge required to tackle a particular problem in a professional context poses an additional challenge: namely, shallow knowledge from a number of discipline will not suffice. Thus, when aiming at obtaining the appropriate knowledge, i.e. sufficient amount and quality, to solve a particular problem, we need to achieve some sort of balance between the extremes of Carr’s deep and shallow knowledge. Finally, it is important to recognise that the context in which the problem-to-solve is located is changing all the time, and while the problem solvers learn, they see the problem from a changed perspective, which means that the problem itself is continually and rapidly being reframed.

The purpose of the TPDS is to enable the learners to achieve a dynamic web of competencies in the form of high complexity meta-knowledge from a variety of disciplines. This way, acquiring high-level meta-knowledge in a variety of disciplines, the learners in the TPDS will not fall into the trap of over-simplifying the real-life problems they attempt to solve but will rather ‘complexify’ themselves to meet the demands of the problem (Dörfler & Eden, 2014; Weick, 1979, 1995). Thus, equipped with specialist knowledge in their native disciplines and high-level meta-knowledge from a number of adjunct disciplines, the learners will be able to undertake a so-called tentative process of creative problem-solving. During this process, they will use knowledge components from their native as well as adjunct disciplines as they need to, which is how we see transdisciplinarity. They will also need to take a consistently reflexive
approach to both themselves and their problem before, during and after the problem-solving, thus introducing the final reflexivity aspect of our model.

**Framing the TPDS concept**

Having introduced why we needed to adhere to the three principles for framing the TPDS concept, in this section we elaborate these in further detail building on the influential works of Karl Popper, Basarab Nicolescu and Pierre Bourdieu.

1. **The process of tentative problem solving.** Since participants in the TPDS will bring real-life problems that they want to tackle using the highest level of scholarly knowledge, we adapt Popper’s (1974, pp 153-156) tentative approach to problem solving, which we generalise as the first principle of our school concept. Popper started by reconceptualising the Hegelian ‘dialectic triad’ (thesis/antithesis/synthesis) as a trial and error-elimination process which is iterative and which draws on a knowledge base which is increasing. According to the first iteration, all scientific discussions should start with identifying the problem (P1) to which some sort of tentative solution or tentative theory (TT1) is offered. Then this tentative theory is critically tested in an attempt at error elimination (EE1). The tentative theory and its critical revision give rise to new problems (P2). The following schema summarizes the process:

   P1 — TT1 — EE1 — P2

With increased knowledge, an attempt is made to solve the reformulated problem (P2), coming up with a new tentative solution (TT2), which is subsequently further refined (EE2), during which process the problem is better understood, and eventually reframed in the light of the new solution (P3). These iterative cycles continue, until a match is found between the problem as formulated and the solution proposed. In the later elaboration of the process, Popper argues that any element of the P-TT-EE triad can be a viable starting point, meaning that the potential learners may use any of them as the starting point of their studies. In order to distinguish this sophisticated problem-solving process from accomplishing well-structured tasks, we label it *creative problem solving*, where ‘creative’ refers to the necessary creation of new knowledge (Dörfler, Baracskai, & Velencei, 2010; Stierand, Dörfler, & MacBryde, 2014).
2. The process of transdisciplinarity. Transdisciplinarity has a natural link to advanced scholarly research conducted by practitioners in applied contexts (Boud & Costley, 2007; Costley & Armsby, 2007), therefore a transdisciplinary approach is a natural fit with work-based learning (WBL) and thus it becomes the second principle of the TPDS concept. In order to conceptualise transdisciplinarity, we need to delineate it from related concepts; we base our delineation on Klein (2010) and Gibbs (2015). To put it simple, interdisciplinary refers to an empty space occurring between disciplines, multidisciplinary would be belonging to multiple disciplines at the same time, while transdisciplinarity means transcending disciplinary boundaries and crossing various disciplines in that process. Boud and Costley (2007) define transdisciplinary awareness as a significant way of approaching problems in applied settings. Nicolescu (2002, 2010, 2011, 2015) further structures transdisciplinarity as a formalised methodological approach, therefore this is the view of transdisciplinarity that we use as our starting point, since it can be linked naturally to the above introduced tentative process of creative problem-solving (Velencei, Baracskai, & Dörfler, 2015a; Velencei et al., 2015b). Transdisciplinarity in this sense offers a cutting-edge approach to the interface of academic and professional worlds as well as a process for tackling problems from real life with the highest level of scholarly knowledge, using the academic toolbox.

3. The process of reflexivity. The third principle of the TPDS concept is reflexivity. Our starting point for conceptualising reflexivity is Donald Schön’s (1983) ‘reflective practitioner’; this concept is naturally relevant to our school, as it offers a framework which embraces complexity, allows for exploring tensions and contradictions while placing intrinsic value on practice (Costley, Elliott, & Gibbs, 2010). However, we also want to extend this concept in several ways. Bourdieu (2004) extended the concept of reflexivity to the level of discipline, in his case sociology:

Casting an ironic gaze on the social world, a gaze which unveils, unmask, brings to light what is hidden, it cannot avoid casting this gaze on itself – with the intention not of destroying sociology but rather of serving it, using the sociology of sociology in order to make a better sociology.

(Bourdieu, 2004, p 4)
Similarly, we wish to conceptualise reflexivity as a transdisciplinary entity, reflecting on real-life problems from the viewpoints of various ‘human’ and ‘social’ disciplines. In addition, we are to include both reflective and reflexive practice in order the emphasise the significance of subjective understanding(s) (Cunliffe, 2004, 2009). The role of reflexivity and reflectivity in transdisciplinary knowledge creation is so fundamental that some authors (see e.g. Costley & Pizzolato, forthcoming; Jahn, Bergmann, & Keil, 2012) claim it to be the main purpose of transdisciplinary research practice.

Synthesising the above three principles, we get a transdisciplinary process of creative problem solving which is reflexive and reflective at all levels. Reality, from which the problems originate, imposes transdisciplinarity which, in turn, makes reflexivity/reflectivity necessary. Practitioners entering the process bring their initial problem (or TT or EE) from their practice to the TPDS, where they acquire high-level meta-concepts from adjunct disciplines, and they use these meta-concepts in iterative P-TT-EE cycles throughout which they change how they see the problems, and by doing so they change the problem itself. When attempting to solve these reframed problems, they may borrow viewpoints, information, techniques, concepts and whatever is needed from their adjunct disciplines, and use these without becoming practitioners in those adjunct disciplines. This raises the problem of validity, which will be repeatedly revisited during the time the learners spend at the TPDS, and the learners will be urged to rise above daily demands and look at the big picture, as Handy (2003) would say, to ‘helicopter up’ to reflexively evaluate their own approach.

**Bifocal content structuring**

In terms of content structuring, the program the TPDS has two focal dimensions: (1) the ethical axis of “Doing the Right Things” and (2) the complexity-axis of “Doing Things Right” (Drucker, 2006). Using a technical example, when building a bridge, we can ‘do it right’ that is, being familiar with the engineering principles, we can erect a construction over the river that meets the technical requirements. However, ‘doing the right thing’ implies a consideration of profoundly ethical concerns, too. For instance, the social and economic impact of the given bridge and the unfolding local or global economy may raise some
unpredictable situations. Furthermore, dealing with practical and ethical issues poses challenges in most cases, thus the link between ethics and transdisciplinarity offers areas to explore during the creative problem-solving process and provide departure points for the reflexive/reflective practices which facilitate a range of ways of approaching stakeholder issues.

The TPDS concept follows the example of the New Alexandrians (Tapscott & Williams, 2011), meaning that knowledge is freely created, shared and debated, any discipline can be included for a discussion if someone finds it worthy of interest – essentially, ‘anything goes’ (Feyerabend, 1987, 1993). This is a fairly radical contrast to the cognitive, epistemological and methodological stances typically cultivated in academic institutions. We hope that the TPDS model will support the creation of an organic community of freely thinking New Alexandrians, rather than an alumni group based on artificial distinctions.

**The passionate learner’s journey of creative problem solving**

For curriculum design, we tend to follow the one elaborated earlier by Baracskai et al. (2011). The program of TPDS is constructed along five cornerstone concepts: (1) the process is quasi-algorithmic; (2) the steps are quasi-heuristic; (3) the conception of education is quasi-incremental; (4) the vision, the so called ‘Big Picture’ of the curriculum is quasi-abductive; and finally, (5) the abductive ‘Big Picture’ is quasi-validated by the conditions of a particular recipient. While here we cannot provide a detailed description of the five cornerstone concepts, what is prevalent is that each step has a ‘quasi-' label which signifies a moving away from the common practice of following well-structured recipes (for more details see Baracskai et al., ibid). Our claim is that the proposed model is more responsive to professional learners, and in the remainder of this section we describe the journey of the practitioners who come to the TPDS and introduce labels for tracking their changing identities.
Figure 1: Schematic diagram of the learners journey

The journey of the curious practitioners, who are also passionate learners, starts by engaging with some taught components along the two focal dimensions, namely complexity and ethics. Complexity is covered by three disciplines: epistemology, research philosophy and complex systems. Ethics is also covered by three disciplines: economics, cultural anthropology and social spaces. The purpose of this first phase is to open up the minds of the curious practitioners (passionate learners) by presenting them with meta-knowledge from grand-masters of the mentioned disciplines. As a result, it can be expected that they will see their research problems with a different knowledge and mindset, and therefore they will see differently framed problems. Another prospective outcome of this phase is that the passionate learners become members of a community of transdisciplinary practitioners; they will become New Alexandrians.

The journey of the New Alexandrian continues shifting from the abstract thought components to the process of creative problem solving, thus they progress to become tentative problem solvers. This does not mean that taught components completely disappear, but their function becomes more specific. As the tentative problem solvers tackle their ever-changing research problems, they will draw knowledge (ideas, tools, perspectives, etc.) from various adjunct disciplines. To enforce the transdisciplinary nature of the research process, each study will have to include one concept from the native discipline of the tentative problem solver and one from each of two adjunct disciplines. Through this transdisciplinary process, the learners
become what we call New Practitioners, and in the final step the New Practitioners become Reflective Thinkers.

**Concluding remarks**

In this paper we introduced a new school-wide concept in which, through the transdisciplinary, reflexive/reflective, creative problem solving process, curious practitioners become New Alexandrians and subsequently new practitioners. The significance of the TPDS concept is that we put the transdisciplinary reflective problem solving process in the foreground, meaning that the research process does not follow a pre-planned process, the New Alexandrians individually decide about the new (revised) direction of the research at each crossroads. They will do what they believe needs to be done as they interpret the problem with their available knowledge at a given moment. We believe that although this approach is somewhat unconventional, it is relatively easy to understand and accept. What is perhaps more challenging to accept is that the New Alexandrians will also learn what needs to be learned at the moment when they know what they need to learn. In the words of Charles Handy (1998):

> In life and in work, we learn things when we need them, not before we need them.

(Handy, 1998, p 217)

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**References**


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engineer. Viktor is a dedicated and passionate teacher. He designed and delivered the first MOOC of the Strathclyde Business School titled “Understanding Modern Business and Organisations”. He also assisted Zoltán in designing the school concept presented in this paper and is also one of the appointed teachers.

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Judit Kádár has taught American and Canadian studies at Eszterházy University (Eger, Hungary), with ethnic and multicultural foci. She obtained FEFA, FEP, FRP/CEACS, JFKI and Fulbright research grants, lectured at GCSU (Milledgeville, USA) and UNM (Albuquerque, USA). Her research included the alternative histories in Canadian fiction (PhD), then the psychological and sociological implications of Othering/indigenization in North-American literature. She published *Going Indian: Cultural Appropriation in Recent North American Literature* (2012), completed her habilitation at ELTE, Budapest (2013), and currently explores mixed blood narratives/ identity negotiation in Canadian and *Nuevomexicano* writing. She was the director of the EKU International Relations Center and has worked in internationalization for years. She has been the country representative of a Canadianist organization (CEACS), a board member of an English studies organization (HUSSE) and a reviewer of the Tempus Foundation. Currently she also works as the educational expert of the Central Bank of Hungary.