



Introducing a critical dialogical model for vocational teacher education

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Abstract

The purpose with this article is to conceptualise and present what is referred to as a *critical dialogical model* for vocational teacher education that takes into account the interaction between theory/research and practice/experiential knowledge. The theoretical framework for the model is based on critical hermeneutics and the methodology of dialogue seminars with the aim to promote the development of a 'critical self' among the vocational teacher students. The model enacts an interface between theory and practice where a number of processes are identified: a reflective-analogical process, a critical-analytical process and an interactive critical self-building process. In order to include a theoretical argument concerning the issue of content, the concept of 'learning capital' and its four sub-categories in terms of curricular capital, instructional capital, moral capital and venture capital is used. We point at content-related aspects of student learning and how a critical self has the potential to promote various kinds of 'capital' and capacity building that may be of importance in the future work-life of the vocational teacher student.

Keywords: vocational teacher education, theory and practice, critical hermeneutics, dialogue seminars, learning capital

Introduction

Like any other professional trainer, teacher educators struggle with the question of how theory and practice best should be merged in education. Besides the conventional structure with theoretical studies at the universities and practical parts carried out through internship there is now a plethora of ways for organising teacher education. For instance we have seen a tremendous growth of work-based learning programmes in universities all over Europe (Lester & Costley, 2010) that in turn has forced universities to reconsider the structure and content of their educations, e.g. more flexible ways of studying through ICT and how you appreciate and validate vocational knowledge. In this respect work-based learning serves as an important conceptual framework because it, as Joseph Raelin puts it, 'acknowledges the intersection of explicit and tacit forms of knowing at both individual and collective levels' (Raelin, 1998, p. 280).

There are no quick fixes or universal solutions to the question of theory and practice in professional educations, but there are always reasons for pursuing and discussing new rationales and *modi operandi*. One established method that has been used for reflective practice and professional development in various contexts - e.g. professional educations like civil engineering, regional development and in workplace innovation (Ennals, 2014; Johnsen & Ennals, 2012) - is the dialogue seminar method. The method is based on a systematic work to articulate and explore tacit dimensions of knowledge and experiences in daily work life. It originally comes from the academic discipline skill and technology, a subject that draws on the works of Michael Polanyi (tacit dimensions of knowledge), Ludwig Wittgenstein's philosophy of language (rule-following and practice) and Hans-Georg Gadamer's hermeneutics (Göranzon & Hammarén, 2006; Mouwitz, 2006; Ratkic, 2006). The method is relatively untested in the context of teacher education and as any other method it has its pros and cons (which will be described in detail later on). At our university dialogue seminars are used in vocational teacher education (VTE). They have also been used in an education for teachers supervising teacher students during internship (Lindqvist, 2015).

However, out from many years of experience working with the dialogue seminar method, several problems and shortcomings with the method has emerged. For example, there is a lack of theoretical or research-informed perspectives, critical examination and the dialogues tend to move towards a consensus, leaving examples and experiences unquestioned. The absence of critical points may result in that a potentially valuable and extensive learning might not occur. There is a need of taking the method further and to combine it with theoretical and critical dimensions.

In this article we present a *critical dialogical model* (henceforth abbreviated CDM) for VTE. Our ambition is to conceptualise and develop a model that creates conditions for organising an education which takes into account the interaction between theory/research and practice/experiential knowledge, visualises the professional progression and learning of students and offers tools for future professional development and participation in collegial learning practices. In the discussion, we will argue that this model is applicable and suitable for adult learners and VTE students because it highlights the complex nature of vocational knowledge.

With the aim to understand and make visible the learning processes of teachers, Lee S. and Judith Shulman (2004) have developed an, for this particular context, interesting theoretical framework for addressing content-related aspects in capacity building in VTE. With the concept 'teacher capital' they develop a theoretical perspective on teachers' learning as a multi-layered system where the individual teacher is encompassed by vision, motivation, understanding, practice and reflection in a learning community within a wide context of institution, profession and policy. At the overarching level of policy and allocation of resources they identify four sub-typologies of teacher capital: Moral capital, venture capital, curricular capital and technical capital (Shulman & Shulman, 2004), concepts that will be further elaborated and related to the CDM in the final section of this article. Before this, the methodological and theoretical foundations of the CDM will be presented, beginning with the dialogue seminar method and examples of how it has been implemented in teacher education.

Exploring professional skill and practical knowledge: The dialogue seminar method

During the 1980s a new field of science emerged that focused on changes in skill and practice of various professional groups due to computerisation and automation in information society (see for instance Göransson, 2009; Mouwitz, 2006). Ever since the early studies focus has been directed towards the relationship between tacit dimensions of knowledge and formalised/codified knowledge in workplaces and educations (Ratkic, 2006). Explorative and heuristic case studies – whereof many are based on a hermeneutical approach in the theoretical and methodological tradition of Gadamer – dominates the research conducted with-in what today is the subject skill and technology. Practical/tacit knowledge – judgment, reasoning, responsible actions, interpretation, deliberation – is considered to be the kernel of professional skill and formalised knowledge – regulations, instructions, routines – serves as a supportive structure for the professional (Backlund, 2006). An important aspect thus is to interpret and to look for

representations of tacit knowledge and skill for the promotion of professional development and knowledge formation. Another way of describing this and the interactions between different perceptions of knowledge is through the words of Bo Göranson (2009):

[W]e interpret theories, methods and regulations through the familiarity and practical knowledge we gain from being active in a practice. In the dialogue among people involved in a practice, there is some friction between the different perceptions people have based on their different experiences (different examples of familiarity and practical skills). Being a member of a practice while at the same time acquiring greater competence requires a continuous dialogue. Being professional means extending one's perspective to encompass a broader overview of one's own skills. According to this argument if we remove all the practical knowledge and knowledge of familiarity from an activity, we will also empty it of propositional knowledge (p. 128).

Following the argument above, it is obvious how practical knowledge is put at the centre of professional skill and a practice. It is important not to mystify the concept of tacit knowledge. Knowledge can be 'tacit' simply because professionals sometimes want to keep their skills and special techniques secret to avoid competition (e.g. like the Master in Medieval society). Another fact is that 'knowing' is intimately connected with 'doing', which makes it very hard to explicitly describe actions or processes that demand fast decisions (Janik, 1991). At the same time it undoubtedly poses a number of methodological problems. How is it possible to make practical knowledge and familiarity of knowledge accessible for exploration and work with it empirically? This is where the dialogue seminar method comes in.

The dialogue seminar method today serves as an underlying structure for professional development and knowledge formation within a wide range of professions. When professionals describe and talk about their skills they very often use a personal, reflective and narrative language where meaning is transferred through examples, metaphors and/or analogies. What we are dealing with is a kind of thinking that is analogical to its character, not hypothetical and theoretically abstract (Johannessen, 2002). The dialogue seminar method helps professionals to articulate and formulate certain aspects of their practice and experience. The most common way to work is to form a group of 6-8 participants. By using specific 'impulse texts' (it may be a drama, a poem, a novel, excerpts from a classical philosophical work, a picture, a movie) the purpose is to bring forth associations, images, memories, reflections and experiences from their work life. The participants prepare before the seminars by actively reading an impulse text where spontaneous associations, thoughts and reflections is noted in the margin. The notes are summarised in a personal text, which is read aloud during the seminar. All participants are invited to comment, but there is no criticism. Central themes, patterns and concepts that emerge during the seminar are noted in so-called idea protocol, a kind of summary and interpretation

of the dialogue seminar by one of the participants. Before the next seminar the idea protocol is used together with new impulse texts. Hence a reflective and hermeneutic spiral is created through a series of seminars that also can be complemented with lectures, drama and music (Göranzon & Hammarén, 2006; Hammarén, 2002).

Experiences, reflections and examples are personal and subjective but instead of disqualifying them, the dialogue seminar offers an arena for the encounter between different notions and concepts. It is an intersubjective context driven by a search for universal characteristics as well as the particularities of a profession. Most important of all, focus is on the conceptual world of the practitioner, which Sven Åberg (2008) justifies in the following way:

To study a practice is basically a quest for broadening your repertoire of ways to deal with the outside world. If the outside world is ambiguous the language to describe the practitioner's relationship to it must be able to express the inherent contradictions we are interested in. In this work, we have no use for a concept of rules that we have given a metaphysical status as the basic pattern of reality. It is rather the ambiguity we want to gain experience of, by examples, whether they are expressed in linguistic form or in actions we can see and reflect upon. (p. 186, *Our translation*)

The dialogue seminar method can thus be seen as a condition for initiating and underpinning a process of reflection within and between individuals where the language of the practitioner/practice dominates. The dialogue that evolves may be described as 'dialogues between practitioners', something we will take into account as one of two fundamental aspects of the model we intend to develop.

Nevertheless, there are risks with a far too one-sided focus on experiential and practical knowledge. One has to bear in mind that the dialogue seminar method was developed for professionals with many years of work experience. Experiences from an EU-funded project regarding mobility for VTE students and teacher students from other programmes in the South Baltic Sea region has shown that the lack of previous work experience must be taken into account when applying dialogue seminars among younger students, especially the selection of impulse texts. Even if aspects such as cultural and communicative obstacles must be regarded, it became evident after a couple of seminars that the teacher students with most worklife experience found it much easier and more rewarding to use dialogue seminars (Alvunger & Nelson, 2014).

Another weakness with the dialogue seminar method is the obvious risk that the dialogue – often unreflectedly and unawarely – tends to move towards a consensus. This tendency of harmonisation is by no means unique for this method but can be seen as typical for dialogues among practitioners in the same line of profession. It is also due to the fact that phenomena preferably are described from within, that is from a subjective perspective. From such a starting point it can therefore be seen as problematic for the individual to distance him-/herself from the own self as object of study, that is, the movement from close-

ness to critical distance is hard to achieve. During the seminars there is for certain a confrontation between different views from intersubjective encounters, but there are no theoretical or research-informed perspectives to critically scrutinise phenomena or observations. In other words, the experience-based knowledge formed in the intersubjective encounters between practitioners are not challenged or questioned in a manner that lays the foundation for progressive strategies and improvement. The absence of critical points may result in that a potentially valuable and extensive learning might not occur.

In the next part some of the critical views on the dialogue seminar method pointed out above will be developed through arguments in critical hermeneutical theory and methodology. As a next step, we will create a theoretical and methodological fundament for our model.

The relationship between theory and practice from of a critical hermeneutic perspective

The development of a model aimed for VTE cannot sidestep a theoretical discussion on how the relationship between theory and practice should be understood. Our discussion will be based on the methodological foundations of critical hermeneutics, foremost the works by the philosopher Hans Herbert Kögler (1996) and the sociologist Jürgen Habermas (1995). Regardless if we are talking about critical hermeneutics or skill and technology and the dialogue seminar method, Gadamer's (1994) theory on the hermeneutic approach of interpretation is essential for them both. At the same time – and as the name implies – critical hermeneutics contains a refutation of some of Gadamer's basic theoretical assumptions. It is this critique that we will refer to in the first place.

The relationship between theory and practice is ever-present within the area of education in terms of on the one hand scientific research and on the other hand the everyday and complex practice within an educational institution, for instance a teacher education. Generally speaking, 'theory' is conceived as something the students meet and take part in during their campus studies at the university while 'practice' is the 'reality' and activities in the work places that theories in some sense try to say something about. Teacher education is quite often criticised for being far too theoretical and that instead of studying research students mostly appreciate what they learn during internship and that they consider this to be the most important for their future professional career. However, in a broader sense the tension between theory and practice has a very long history. Already in Aristotle's reasoning and line of thought regarding *theoria* and *praxis* as two different types of human activities this tension is crucial. This divide and opposition later formed a fundament in the Cartesian epistemological paradigm with its clear separation between subject and object and abstract

thinking and concrete action. With the emergence of positivism as a philosophy of science in the 19th century, the notion of a split between the meta-physical and physical and between interpretation and truth further deepened the view that the theoretical and practical are separate entities. Still today this notion continues to influence our views on the relationship between theory and practice.

With the breakthrough of pragmatism in the first decades of the 20th century – championed by philosophers like Charles Sanders Peirce, William James and John Dewey – the question on the relationship between theory and practice to a great extent was dealt with in another fashion than before. Peirce, Williams and Dewey stressed knowledge as relational, contextual and functional and thus not something that is possible to separate from man and human action. By this definition – that what we consider to be theoretical and propositional knowledge is embedded in practice – all knowledge in some sense is practical and the boundary between theory and practice is transcended. Together with the advent of postmodern and socialconstructivist theory from the 1960s, the notion of knowledge as contextual was further emphasised and paired with a farreaching epistemological relativism. According to this new line of argument knowledge was relative, arbitrary and contextual and the division between theory and practice was characterised as a social construction where scientific knowledge is an expression of ideological exercise of power. Elizabeth Rata (2012) describes the postmodern and socialconstructivist position in the following way:

Relativists, such as those found in postmodernism and constructivism, deny the distinction exists, claiming instead that all knowledge is ideological in the sense that it is constructed in the interests and 'voice' of a given social group. Knowledge, according to the voice discourse approach is generated by the experience of a particular social category and can only really be known by those with this experience. (p. 104–105)

We see this kind of contextualism and relativism in postmodernism as problematic and not very fruitful in the development of a teaching model for professional educations. The same goes for the traditional epistemological paradigm where theory and practice are treated as totally separate entities turns. Rather than allowing theory and practice be dissolved in each other and the lines blurred or deal with them as essentially different, we will focus on the internal relation between them as a basis for a dialogical model in which the dynamics lies in the tension between practical knowing of the contextual/praxis and the critical and analytical potential of theory.

To return to critical hermeneutics, Kögler (1996) – in coherence with Gadamer – argues that the subject's interpretation of the surrounding world is an essential factor in order to obtain an understanding of the practice or phenomenon, which you in a certain context intend to investigate. But even if you, as Gadamer would say, through the structure of dialogue succeed to challenge

different views and the pre-conception of various subjects, Kögler (1996) underlines that this dialogical process yet still risks to remain on a relatively superficial level. That is to say, by relying solely on the dialogue between subjects it is not possible to go deeper down and fundamentally challenge and question pre-conceptions and attitudes the subjects generally have regarding their own practice. Habermas (1994) expresses a similar critique when he stresses that a hermeneutical approach and way of working is inclined to end up in a kind of linguistic idealism where no factors or conditions outside of the different views or experiences of the subjects get any real space or influence in the discourse/conversation. From Habermas point of view, the arguments and 'truths' that come out of the dialogical process between subjects risk to become corrupted and 'ideologically impregnated' and hence shaped by latent power relations (1994). A problem with the hermeneutical approach of Gadamer is thus, to follow the arguments of Kögler and Habermas, that such factors are not observed and scrutinised within the frame of hermeneutical interpretation. Since the agents are so deeply involved in the practice they are a part of, pre-conceptions and actions are generally taken for granted. Therefore a 'someone' or 'something' external is required that can question, highlight and make presumptions and beliefs subject to critical examination and reflection, that is:

Beacuse the subjects take these dimensions of meaning and action for granted, it is up to *the outsider* to gain a reflective understanding of the subject's symbolic-practical background. What seems evident and natural to participants requires "explanation" and reconstruction on the part of the uninitiated interpreter (Kögler, 1996, p. 257-258).

Theory and research can in this context be seen as providing an important function for creating a reflective understanding through taking a clear position and view-point from the outside. We are not arguing that theory itself represents an absolute and objective 'truth'. Rather theory should be regarded as a fix-point that in a given moment allows the subject to navigate and find a heading among a number of possible directions. In this respect theory has an epistemological leverage through its outsider position and offers analytical concepts and a systematics that enable an abstraction and problematisation of a certain practice and the on-going activities affiliated to this practice. At the same time, theory is totally dependent on the experiences and context-specific knowledge that are derived from the very same practice; partly practice is the foundation for the content and the problems of the moment that are in focus in e.g. a teacher education, partly practice is necessary to continuously apply, test and revise the actual theory. According to Kögler's (1996) argument such a process thus could be compared to a dialogue between theory and practice with the common aim to jointly work towards a coherent and better understanding of the practice. Kögler (1996) calls the outcome of this process 'the truth of interpretation' where...:

...the 'truth of an interpretation' will then have to be the outcome of such dialogic collaboration between theorist and agent – with the understanding that the result will in itself always be to some extent perspectival and surely open to informed criticism (p. 264).

Through this dialogue between theory and practice, theory can provide a critical and more profound analysis of the practice that is being studied. Correspondingly the practitioner presents the theorist with knowledge of the context that enforces the theorist to recurrently question and in some cases revise his or her theoretical assumptions. A similar line of thought is to be found in the argument of the educational scientist Christer Fritzell (2009) who on the basis of Habermas' discourse ethics (see for instance Habermas, 1995) reasons about generalisation and validity. Fritzell argues that generalisation in a hermeneutical context could be described as a:

... movement between 'the small in the great' and 'the great in the small' where the casual nearby is seen as constituted as part in a larger context. The dialogical claims in this respect speaks in favour for a mutual, and if you prefer dialectical, relationship between theory and practice where the parties in a consensus-oriented way relate to each others' perspectives in an active motion towards validity-oriented resonance (p. 204, *Our translation*).¹

In other words the critical dialogical discourse is characterised by a discussion and problematization of a certain content derived from practice where the practitioners themselves are the main agents in that dialogue. In order to allow a deeper understanding of the content and the topical questions – when the practitioners so to say get 'stuck' and don't manage to go any further in their discussions – theory is introduced to critically question and challenge the experiences and pre-conceptions of the practitioners. This is thus accomplished through relating theory to practice and to illustrate how the actual phenomenon that currently is in focus can be understood as part of a larger context. The result of this analytical procedure is thereafter brought back to the complex practice with the purpose to make it more understandable. Starting from the arguments in the previous paragraphs it can be stated that something happens along with this particular movement: Theory provides a foundation for understanding the single aspect while practice imbues theory with meaning in the specific context.

The ultimate goal with the critical dialogical process is accordingly to create a reflective distance among the agents of practice, a distance that allows new thinking as well as a new understanding regarding the actual practice. This does not only open up a space for fresh perspectives on everyday activities but also presents a potential and readiness for change. In other words, the critical dialogue is more than just a method to achieve an increased understanding for a certain concrete phenomena. It also harbours an ambition to foster an approach and awareness among the practitioners. Kögler (1996) calls such an approach as an aspiration towards a 'critical self', a concept that is constituted by a process of: 'reflexive incorporation and differentiated fusion of both perspec-

tives in one and the same agent' (p. 267). As we will discuss below we consider this strive for developing a 'critical self' as a basic fundament in a professional education. Furthermore it is an important condition for the students' capacity building during their education as well as later on in their work as teachers in continuous professional development.

Towards a critical dialogical model for teaching and learning

If we conclude the arguments above it becomes evident that the model for teaching and learning we will present in this section consists of two major dimensions. An essential aspect is that there is an ongoing interactive process between these two dimensions where activities of reflective reading and writing, critical analysis from theoretical perspectives and research and qualified dialogues within and between groups in the shape of dialogue seminars and critical seminars overlap and complement each other.

One of the main purposes with the model is to create a forum for 'dialogues between practitioners' and by this allowing the students to 'conquer' methods and a language for developing professional skill. The main difference in relation to the traditional methodology of dialogue seminars is that theory and research at specific times serves as a general voice - or as an *advocatus diaboli* if you like - in the dialogues. In this respect the model enacts an interface between theory and practice that will promote the development of a 'critical self'. Another aspect is how processes within the model correlates to different modes of knowledge and foremost how the interplay between them not only foster a 'critical self' but also build various kinds of 'capital' that may be of importance in the future work-life of the teacher student.

We will get back to the capital concept and the question about content in the closing part of this article. In this particular section we will however focus on and describe the main processes of the model, the different steps and the modes of knowledge involved. We do so by relating to a perspective on the relationship between research and best practice that has been developed by Håkansson and Sundberg (2012):

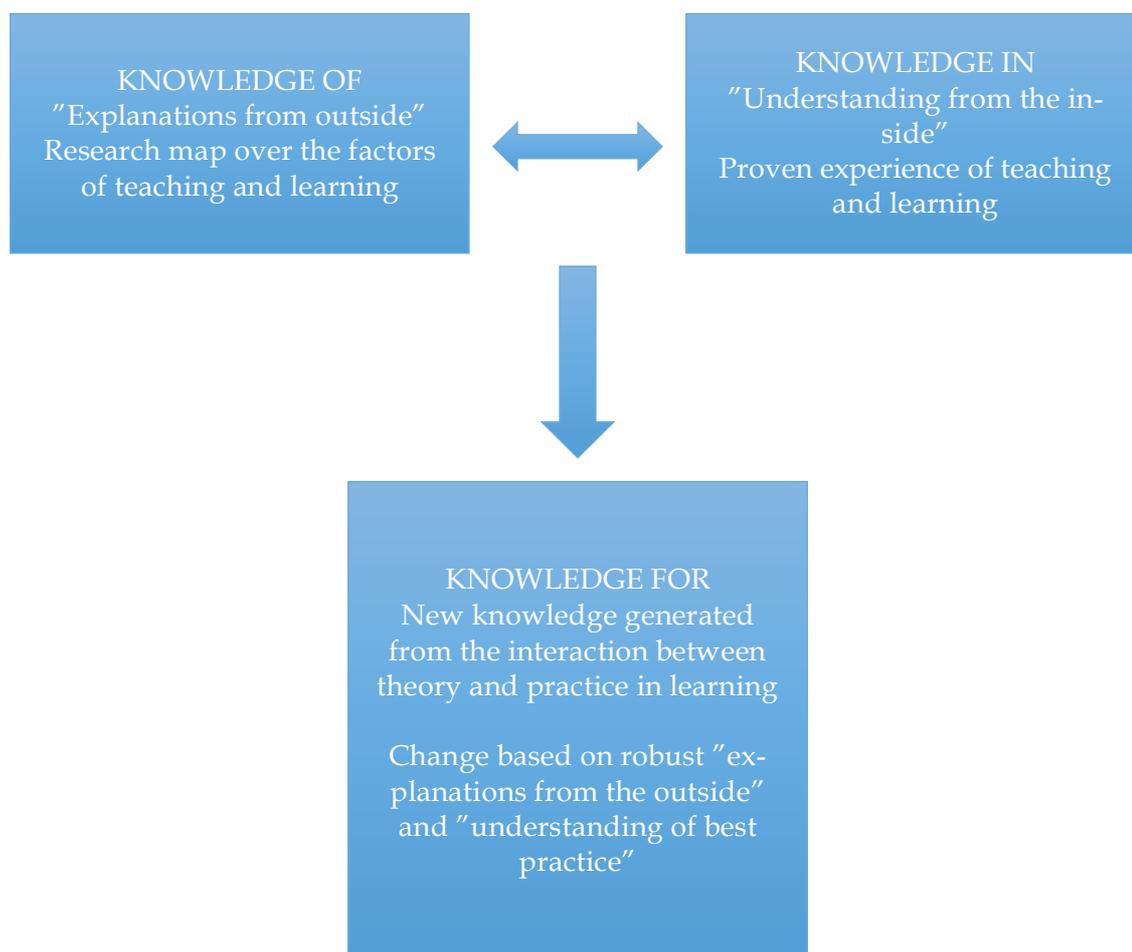


Figure 1. The interaction between research and best practice, adapted from Håkansson and Sundberg (2012).

The figure above not only illustrates the relationship between research and best practice in school development work, but also the different conceptions of knowledge embedded. These three correlates with the works of Marilyn Cochran-Smith and Susan L. Lytle (1999, 2009) concerning the three conceptualisations of knowledge they identify in teacher learning: 'knowledge-for-practice', 'knowledge-in-practice' and 'knowledge-of-practice'. Like Cochran-Smith and Lytle, we see it as essential to break with the traditional notion of hegemony of university-generated knowledge and to put forward the locally situated knowledge of teachers. Above all, we see the CDM and the aim to develop a 'critical self' as a tool for promoting 'inquiry as stance' in teacher education (Cochran-Smith & Lytle, 1999, 2009). In this respect the model becomes a way for the teacher students to understand processes behind posing problems

and dilemmas, questioning, deliberating and challenging assumptions in teaching.

It is important to be aware of the characteristics of the different on-going processes in the critical dialogical model. Before we turn to the specific steps and give examples from how we have worked with the model the processes will be described. We speak of three main processes that are closely connected. Each of these correlate to the different modes of knowledge presented above in terms of being able to explain, to understand and to change (teaching and learning). Of course the separation between modes of knowledge is an analytical construct because propositional/theoretical knowledge, practical knowledge and knowledge of familiarity/practical wisdom all are merged into one in practice. The three main processes that form the critical dialogical model are as follows:

- *The Reflective-Analogical process:* In this part the fundamental content is the students' experiences, reflections, memories, thoughts, examples etc (both in an individual and collective sense). The purpose with this process is to let the students work with experiences during internship, auscultation or other situations related to professional aspects. As has been described, a most powerful tool to access and make explicit tacit knowledge retrieved through socialisation is reflection. But the tacit dimensions are not something that just lies deeply embedded within the individual and waits to be picked up. Such dimensions must be brought forward and articulated by appealing to the creative, aesthetic and sensitive parts of the human mind. The method used is dialogue seminars and a complement can be a personal log that helps the student to make visible thoughts and emotions in relation to professional experience, which is the formation of 'knowledge in', how one does or acts in a specific situation. The process as such is characterised by analogical and metaphorical thinking. Universal dimensions in examples, analogies and metaphors are brought forward through the intersubjective sphere of the seminars.
- *The Critical-Analytical process:* While the reflective-analogical process aims at articulating the so-called tacit dimensions of knowledge in action and experiences from practical situations, the critical-analytical process has a different purpose. In this process the students study recent research and create overviews. Another important part is constructing problems and theoretical-analytical frameworks. By using results from research, the students assemble 'knowledge of', propositional knowledge, a specific topic or content. Reflection does indeed contain elements of critical thinking but in this respect the students are distanced from the object of study and look at problems from the outside. The student takes the role of the observer and analyses and looks into phenomena, experiences, examples, texts and so on from a critical perspective based on theory and research. The idea with theoretical perspectives is to bring the discussion from a concrete level of examples to a more abstract and general theoretical level. The process is characterised by critical-analytical thinking.
- *The Interactive and critical self-building process:* This process concerns the interaction between the two processes outlined above. It is in this respect a process on a meta-level and very hard to explicitly describe. The interplay between

knowledge of and knowledge in become knowledge for change, which is a knowledge underpinning action, judgment and questioning based on informed decisions and solid arguments.

As illustrated below in the figures the two first processes can be divided into several steps while the third process hardly can be specified in the same manner because we are dealing with meta-reflection and syntheses. Thus the interactive and critical self-building process is the outcome of the intersection between the former two. We will begin with describing these steps and after that give some examples of how the processes turn out in practice. A crucial point is that these figures primarily not shall be seen as cyclical in a horizontal way. Rather they are spirals where the process moves upwards as the course progresses. Another important dimension is that there is no rule saying that you after have finished a first cycle in the reflective-analogical process must enter the critical-analytical process and vice versa. There can be several cycles within each of these before you change.

Before starting, groups of 4–6 students are formed by the teacher. It is important that the students don't form the groups themselves. The reason for this is firstly that the teacher makes sure that no student will feel abandoned and left alone. Secondly, if a couple or some of the students know each other from earlier this might have a negative impact on the group as a whole and create a 'group within the group'. Thirdly, working with reflective reading and writing and seminars are personal matters that can be very delicate. It requires a careful and well-considered approach. These groups may very well be held intact throughout a course.

The general starting point is that teaching begins with a reflective-analogical process from an individual basis. In this respect the process advantageously can be initiated with a series of dialogue seminars before the students enter group work. It is up to the teacher and/or the students to choose the topic or theme which will suit best from where in the education and which year they study. If the students are about to go out on internship the process can be used as preparation or if they have returned from internship it is ideal to start off with letting them make an account of their experiences, challenges, worries, successes. Another angle can be to begin the introduction of a new topic and for instance let them read a novel that serves as a stepping-stone and introduction into the topic/theme. It is about wakening their interest and to create associations and thoughts about the topic in order to be able to move on. The different steps in the reflective-analogical processes can be described in the following way:

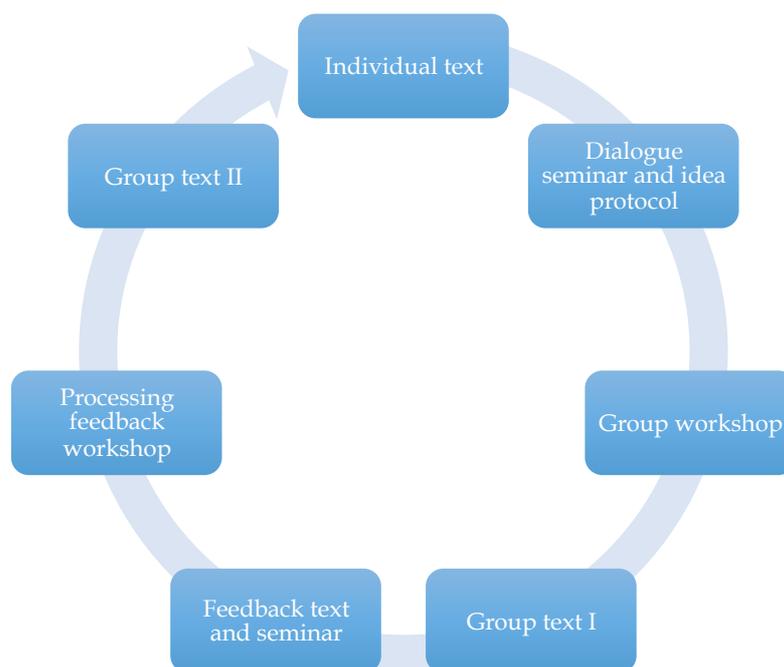


Figure 2. *The reflective-analogical process.*

In **step 1** (at the top of the circle) an individually written text is produced by the student. It can be based on personal experiences from internship, a fictional text, a movie, photographs, poem, a group text (from another group) or other contexts – the most important thing is that the students are advised of the frameworks in terms of theme or topic the text should address. The major point is something that evokes thoughts, associations and reflections. This text serves as a preparation for **step 2** – the dialogue seminar. The student brings hers/his text and read it loud during the seminar. The other students give formative feedback and make comments. The seminar is chaired by the teacher who also writes the idea protocol (later in the education students are assigned to write these protocols). As said above, the process may move on as in the dialogue seminar method with further seminars and idea protocols or follow from the next step into group work (from step 3, below). An obvious reason for continuing with individual texts and dialogue seminars is to have a longer preparation phase for the students in order to thoroughly reflect on experiences and examples.

After the seminar the student group process their individual texts and the of idea protocol during workshop(s). **Step 3** consists of the group writing a joint text (group text I). In the next step, **step 4**, another student group – which also follows the cycle – enters the process. The student groups exchange texts and give feedback to and discuss one another’s group texts during a seminar. This

step also concerns written feedback. In the final steps, the students work with comments from the teacher and the other group. **Step 5** is a workshop for handling the feedback and for rewriting and adjusting group text I. In **step 6** group text II is submitted. The teacher can then decide whether the process shall continue with new texts aimed at reflective reading and writing or if it should transform into a critical-analytical process.

The reflective-analogical process is built on the ideas of the dialogue seminar method. Of course it is not possible to rule out critical aspects during the seminars and in the texts but it is however of great importance that the teacher makes sure that the seminars and the dialogical character is kept within a domain where metaphors, analogies, examples, images and the subjective and personal dimensions of practice remain the main focus. As we have stated before the critical dialogical model strives to achieve and internalise what Kögler calls a 'critical self' in the student. This is why theory and research plays an important part for bringing in other 'voices' in the work. Creating this requires what we call as the critical-analytical process which consists of the following steps:

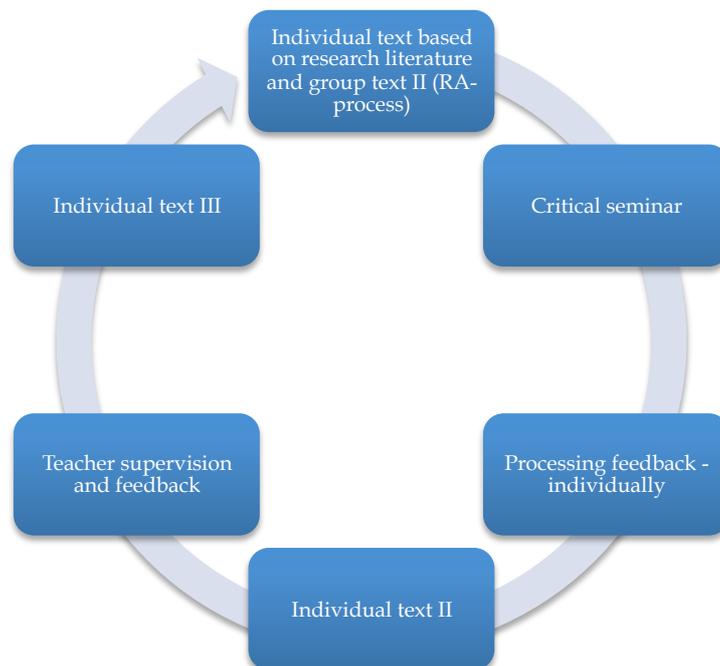


Figure 3. The critical-analytical process.

The critical-analytical process doesn't contain as many steps as the reflective-analogical process. When the students enter this process they read research literature (from the syllabus or research of their own or the teacher's choice) that

is of relevance for the subject. Compared to the reflective-analogical process the critical-analytical process aims at constructing problems, posing questions and dilemmas and applying theory. It all has to do with thoroughly examining phenomena, experiences, examples, texts and so on from a critical perspective based on theory and research. By theoretical, conceptual and analytical frameworks the students move the discussion to a more abstract and general theoretical level. In the process, texts from the reflective-analogical process are used so there is a transition between these two processes.

Step 1 (at the top of the circle) in the process means that the student reads research-based literature and writes an individual text. It can be a review over research or a plan for an essay or thesis. The text may also be based on a series of lectures. As has been said, group text(s) II from the reflective-analogical process is included and the purpose with this is that the student out from the actual material distance her- or himself and examine the text(s) from a critical perspective. In **step 2** the individual text is discussed during a critical seminar, in line with a conventional examination of strengths and weaknesses. After the seminar the student makes eventual corrections and process the text in **step 3**. The individual text II is submitted in **step 4**. In **step 5** the teacher presents feedback and guides the student in his or her writing. The student makes corrections and writes a new version – Individual text III – which in the final **step 6** is submitted. The last individual text (III) can be a part of the student's work with a larger area of inquiry *or* the foundation for a new Individual text I in **step 1** where a group text is used along with research literature. This means that the student can go another round in the process and keep on working with the same problem but from another angle, e.g. the problem of bullying and harassment. This topic – like so many others – can be highlighted from a sociological, psychological, pedagogical or legal point of view. Of course a totally different topic can be chosen and then the students enter another area and go another round in the process. In a long-term perspective the individual texts from the student may be used to gradually create a thesis, for instance in the shape of an aggregation of various articles within a common framework.

Finally, by combining and working with the reflective-analogical and the critical-analytical processes there is clear potential for a dialogical relationship between different domains and conceptualisations of knowledge. Once again it is vital to stress that the separation between different kinds of knowledge is an analytical construct. The most important part is that this is achieved through systematic work that creates a forum for 'dialogues between practitioners' and enables the students to 'conquer' a language for developing professional skill. In the interface between theory and practice formed by the critical-analytical process a 'critical self' is developed. The relationship between the three processes involved within the critical dialogical model can be illustrated in the following way:

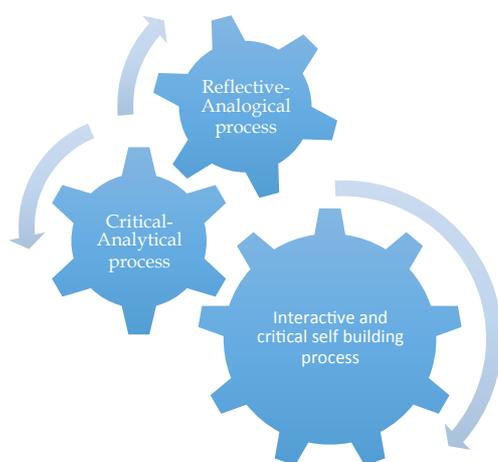


Figure 4. *The relationship between the processes.*

It must again be emphasised that we are not talking about a linear development but dealing with a progression that resembles a hermeneutic spiral. A reasonable question is if this process also is conducive to the creation of various kinds of 'capital' that may be of great importance in the future work-life of the teacher student. In the closing section of this article we will frame the CDM model within a more content-oriented discussion.

Discussion

With the CDM – and the epistemological considerations that underpin its methodology – we have presented a suggestion for how the relationship between scientific theory and educational practice can be managed within VTE. As has been underlined in the introduction of this article, the VTE context is a particularly appropriate setting considering that the students have long experience from their previous line of work and the fact that experiential learning is an integral part of adult education (Bron & Wilhelmson, 2005; Gougoulakis & Borgström, 2006).

Our point of departure has been to focus on the qualitative differences that exist between theory and practice on an analytical level. The practical knowing and skill of a teacher – or any profession for that matter – cannot be reduced to formal and codified categories. At the same time it can be questioned if the exercise of a profession really can be characterised as 'professional' if there are no elements of theory, research and critical analysis. The CDM can be said to be based on two nowadays classical sentences that usually occur in the discussion on the theory – practice-relationship: 'Practice is not applied theory' and 'There is nothing as practical as a good theory', or like Dewey (1929) states:

Theory is in the end, as has been well said, the most practical of all things, because this widening of the range of attention beyond nearby purpose and desire eventually results in the creation of wider and farther-reaching purposes and enables us to use a much wider and deeper range of conditions and means than were expressed in the observation of primitive practical purposes (p. 17).

In the presentation of the CDM it is the procedural dimensions that have been brought forward in the first place. The question of content has indeed been sparsely dealt with since it is hard to say something conclusive about it in a limited space. The point with the model is also that it has the potential to be used for various topics and themes. However, in the work to develop knowledge, abilities and approaches for a future working life the CDM of course must be applied in relation to relevant topics and a qualified content. In didactical research during the last two decades the question of content has many times been left uncommented (Kamens, Meyer & Benavot, 1996; Uljens, 2015). This is problematic due to the fact that student learning not only must be looked upon from the view of organisation but from content and themes. The purpose with this concluding section is therefore to try to expand the discussion to include also a theoretical argument concerning the issue of content in relation to the CDM. As we pointed out in the introduction, we will build on Shulman and Shulman's (2004) different types of teacher capital for teacher learning.

With the aim to understand and make visible the learning processes of teachers Shulman and Shulman (2004) have developed an, for this particular context, interesting theoretical framework. With the concept 'learning capital', the learning of teachers is considered to be a multi-layered system where the individual teacher is encompassed by vision, motivation, understanding, practice and reflection in a learning community within a wide context of institution, profession and policy. At the overarching level of policy and allocation of resources they identify four kinds of capital that cut through the organization, school, teacher team and the individual teacher: Moral capital, venture capital, curricular capital and technical/instructional capital. The relationship and connections between the different kinds of capital is illustrated in an adapted model of Shulman and Shulman (2004):

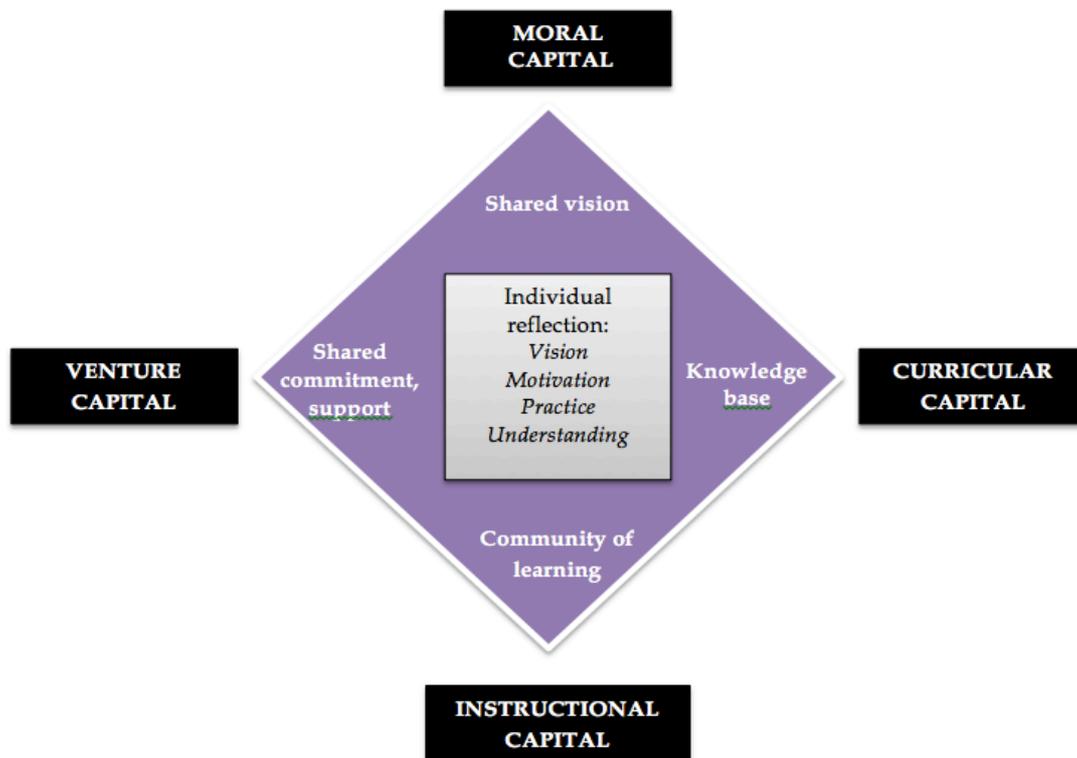


Figure 5. Four types of teacher capital, adapted from Shulman and Shulman (2004).

Each of these capitals is related and often overlaps and complements each another, but they also have their own specific meaning. ‘Moral capital’ refers to school actors’ common and shared knowledge, insight in and visions about teaching and what needs to be developed and improved at the school practice. This type of capital may also include the ability of a principal or a leader for a teacher team to get a group of teachers to work in the common direction and share a joint aim and image of what is supposed to be accomplished. Both principals and teachers require ‘curricular capital’, which is a knowledge base that teachers need in their teaching practice, for example curriculum understanding, content knowledge, classroom management and organization and so on. Closely related to this kind of capital is ‘instructional/technical capital’, which refers to teacher’s knowledges, experiences and capacities to convert or translate the curricular capital in action, in daily teaching practice. In some sense this capital also has to do with the ability to collaborate with colleagues when it regards for instance continuous professional development or collegial learning. At last, teachers can have a large curricular and a technical capital but when it comes to improve and change his or hers teaching practice he or she must have the knowledge and the competence how to do this. In other words, the individual

teacher as well as the organization needs 'venture capital'. If there is a deficit of knowledge or a resistance among teachers and principals in a school to make changes it doesn't matter if it exists a high grade of, for example, curricular capital among teachers. There will never be real and long-term changes in the teaching practice as long as there isn't a readiness and incentive for changes.

By identifying these forms of capital Shulman and Shulman (2004) present a thorough analysis of capacities for teacher learning. However, they do not further elaborate their argument concerning how and in which kinds of studies these analytical concepts can be applied (Adolfsson & Håkansson, 2014). From our side we consider the concepts as a good foundation for discussing precisely the question about content in terms of which knowledges, skills and abilities that teacher students need to develop during training as well as teachers for learning in continuous professional development.

Our point is that students during their VTE must be given opportunities to develop all these forms of capital. It is not possible to just focus on one of them. In order to be well prepared for future working life all four must be included, but of course the capacity building through the CDM will vary due to the specific content of a module in the VTE. Even if moral, venture, curricular and technical/instructional capital overlap it might be the case that a certain content may foster different kinds of capital out from which kind of process in the CDM - reflective-analogical or critical-analytical - the students are engaged in. For example working with experiences of student assessment and evaluation from internship in line with the reflective-analogical process might promote the teacher students' instructional/technical capital in the first place because a lot of the reflections and examples relate to the concrete educational practice. It is the practice of assessment that is being conceptualised through exemplification, reflection and analogies. If the teacher students instead study theories and research on evaluation and assessment along with the critical-analytical process their curricular capital might be strengthened rather than the instructional/technical capital. At the same time the interactive and critical self-building process may enhance the students' venture capital and in the progress of their education they might be more eligible to challenge their assumptions on teaching. Finally, moral capital may be encouraged through setting individual goals and to visualise beliefs, values and principles that serve as cornerstones in the gradually developing teacher identity of the students. Exactly what kind of content that is presented in the course modules is of course something for the teacher educators to decide on. It is our conviction however that Shulman and Shulman's (2004) four different types of learning capital together with the application of the CDM may provide a significant support for VTE.

Finally, the aspects that are related to practice is best described and articulated by the language and conceptual world of the practitioners and should be given room in teacher education. The student gradually 'conquers' his or hers

professional role by finding this language of practice. At the same time an essential dimension of the teacher's skill and professional knowing is to possess language and a repertoire for elucidating and critically examine the own pedagogical practice. Our ambition with the model in VTE is to help the students develop what we would like to call a 'split vision' through the 'critical self' (Kögler, 1996). Basically it is about fostering an approach that aims at challenging the things that are taken for granted in practice and notions founded on a common sense, but also to create an awareness of how different kinds of language and conceptions that are embedded in the teaching profession are at the same time contextual and related to one another. This critical self not only prepares the students for their future work as teachers but also paves the way for strategies in continuous professional development.

Endnote

¹ The quote in original language, Swedish: '...rörelse mellan »det lilla i det stora» och »det stora i det lilla» där det vardagligt näraliggande ses konstituerat som del i ett större sammanhang. De dialogiska anspråken talar här för ett ömsesidigt, om man så vill dialektiskt, förhållande mellan teori och praktik där parterna förhåller sig samförståndsorienterat till varandras perspektiv i en aktiv rörelse mot giltighetsorienterad resonans.'

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