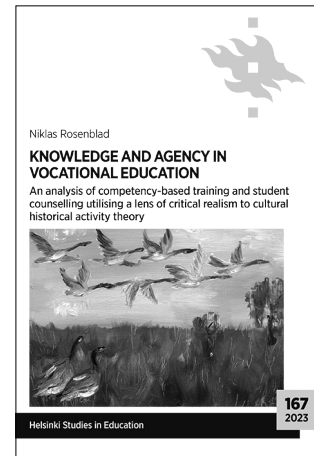


# Knowledge and Agency in Vocational Education

*Niklas Rosenblad*

The text is based on the lectio praecursoria of the author's dissertation at the University of Helsinki 6 October 2023. Professor Leesa Wheelahan (University of Toronto, Canada) was the opponent.

Rosenblad, Niklas (2023) *Knowledge and Agency in Vocational Education: An analysis of competency-based training and student counselling utilising a lens of critical realism to cultural historical activity theory*. University of Helsinki. <http://urn.fi/URN:ISBN:978-951-51-9388-9>



An important purpose of vocational education and training is to provide VET students access to objects of knowledge and the upbringing of agency to use that knowledge in responsible ways. In fulfilling that, VET contributes to social and economic inclusion in society.

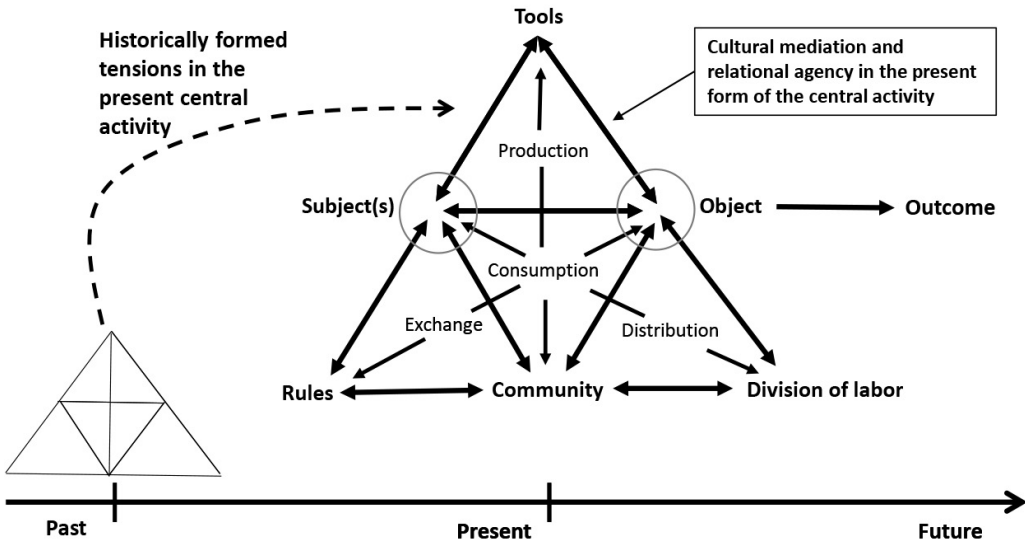
Student counselling consists of meaningful support for students in their learning. Combined with teaching, it is a pedagogically reflected relational practice. Counselling places the student and her needs at the centre of VET. From that centre, the co-portrayer of motives and meaning can be discussed (Vehviläinen, 2014). In the OECD countries, VET has rapidly been reformed toward competency-based training. Competency-based training is an outcomes-oriented approach emphasising self-governed students and skills assessment in authentic work environments (Allais, 2014). Accordingly, students' orienta-

tion in scattered occupations becomes more difficult. This is the reason for the expansion of counselling in VET.

In a way, counselling is 'asked to support' individualisation, accreditation of prior studies, and transitions between education and work. From prior research, we know the notion of competence is a weak informer of learning, empowered by the desire for higher economic prosperity based on better skills, politically motivated by the nation-state's "fear of being left behind" (Kettunen, 2013; Schaffar, 2021).

Reforms cannot motivate research as such. But from changes made, tensions can emerge in the relational work setting. Such tensions can be of theoretical interest to know more about. That was the case in this study.

The upper 'production' sub-triangle (see Figure 1 below) is the basic structure of the Vygotskian object-related human activity.



Own figure based on Engeström (2000, p. 155).

Figure 1. Activity systems in cultural historical activity theory (CHAT).

Vygotsky argued that human action depends on our surroundings. And that cultural tools mediate our higher psychological processes. His thoughts came to challenge the dominating grip of positivism. Vygotsky's thesis was further developed in different veins, of which Yrjö Engeström's activity theory is one (Engeström, 2014 [1987]).

Drawing upon activity theory, Anne Edwards' relational agency (2007) is a concept that comprehends knowledge-laden and object-related ways to act professionally. The object in activity systems is a fragile and infinite horizon constituted by subjects. We attach meaning and motives to objects by our mental capacity of reasoning. If these object-mediated motives meet the need state of the activity system, it produces some kind of outcome. Activity systemic analysis starts from the historical form of the activity, from where tensions emerge to the present forms of the central activity.

This research has been twofold: this thesis is the second part, a theoretical inquiry. The

first part is based on three ethnographic sub-studies, which can be called empirical due to the scientific method. The sub-studies reveal that measurable goals are in focus, whilst immeasurable meaning for people vanish, suggesting that an individual's economic value in society is accentuated. For students in VET, qualifying for jobs is seldom the only motive. People can have a million reasons for entering VET, but the institutional focus cannot be whatever. It must reflect steering documents and curriculum. When techno-economic rationality is tightened, goals are narrowed. As Sanna Vehviläinen (2021) concludes, counselling must increasingly balance questions of people's needs with expectations of results.

Analysing needs and results, I have found a clash between people's needs and individualised goals in competency-based training. On the one hand, objects we find responding to our needs will motivate different actions in different situations. On the other hand,

managerial structures of economisation suggest more simplified ways of thinking. That is, a thinking based on goals-rationalisation that holds that agreements about ends can inform instrumental actions responding to the categorised end. In other words, ends justify means. The antagonism between these two competing perspectives, object-related meaning and means adjusted by ends, expands at all boundaries of the activity system. Contradictions alongside these boundaries are portrayed as arrows in Figure 2.

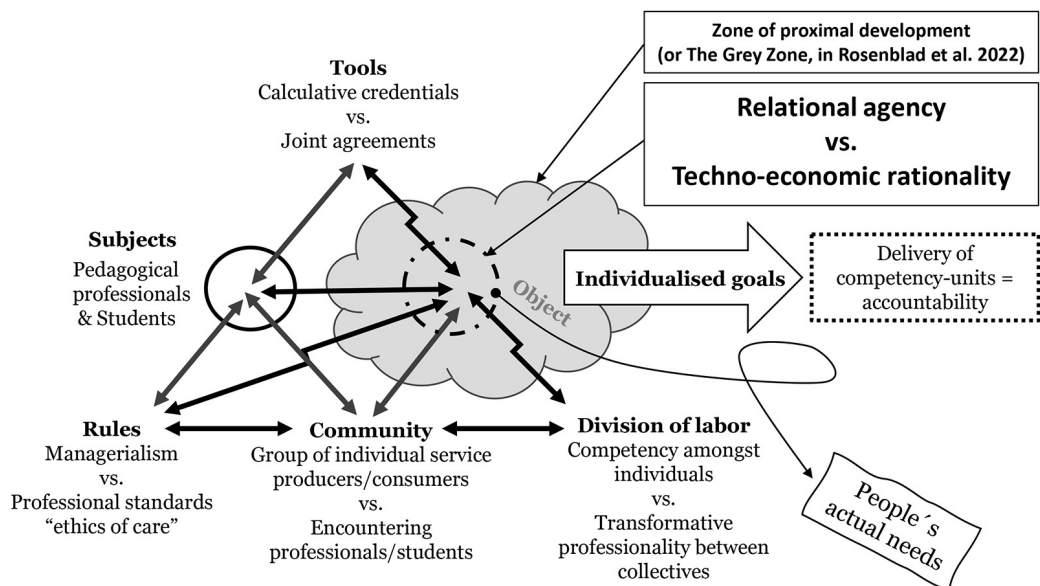
Let me put this differently: Competency-based training proposes individualised goals and customers, given their procedure, value, and direction. Informed by human capital theory and Homo Economicus, altogether, pushing toward the desired outcome whilst separating students from each other. All three sub-studies suggest that technical rationality skews counselling in VET to only focus on individualised goals, and in so doing, object

motives fade, and people's needs disappear.

These results empirically confirm Engeström (2018) that as economisation is emphasised, objects of meaning for people become harder to portray. Professionalism develops relationally between people and the collaborative activity they are part of.

Let me explain why competencies reject professionalism: When a certain “knowing in practice” is assessed in a task-oriented performance, as is the premise for competency-based training, the outcome is forced to match the observable effect of that particular action. In the following step, the assessment of that task is the competency unit: an atomised bit of knowing. These measurable bits are then aggregated to a competency-based vocational qualification, like a mosaic or a Tetris game.

When tangible competencies give proof of accountability, the rest can be ignored. I needed to go deeper. There is an ongoing Cedefop-based discussion around VET, arguing Kolb's



Own adaption of Engeström (2000, p. 157) and Rosenblad et al. (2022) publication III ('The Grey Zone'), pp. 15–18.

Figure 2. Individualised goals vs. People's actual needs.

learning theory is part of competency-based training in Finland. David Kolb's thoughts about reflection on experience were based on Dewey's transactional theory of knowing. Dewey's approach is in many ways admirable, but it enabled further confusion about the lines between knowing and knowledge, which Bertrand Russell emphasised already in the nineteen forties.

This is at the centre of the competencies-doctrine. For instance, in Swedish language, VET focuses on "Kunnande", not "Kunskap". The same holds in Finnish; the focus is on "Osaaminen" not "Tieto". The root of this issue can today be traced back to Reijo Miettinen's discussions some two decades ago (Miettinen, 2000). He elaborated that Kolb introduced the shift towards the instrumentalism of learning, or "learnification", in Biesta's discussion. Knowing in practice vanishes relational objects of knowledge in VET.

I followed this down to the notion of competencies, argued to include values, attitudes and skills, but was detached from cultural tools, meaning for people, and social structure: in terms of social realism, the competency doctrine holds that we can change societal structures by changing the way we think; or differently, in orthodox economics, society is nothing more than the sum of individuals. This is deeply problematic. I needed to analyse the new "mosaic-like" being of personhood via the problematic reduction of knowledge into "knowing". I couldn't do that with activity theory alone, so I utilised the lens of critical realism to it (Figure 3).

Roy Bhaskar's critical realism is about the stratified domains of reality committed to ontological realism (Bhaskar, 2008 [1975]). The ontological reality contends that statements about the world (which is ontology) can't be reduced to statements about our knowledge of the world (which is epistemology). In other

words, depth-ontology is about the study of being.

And for objects and people in the world, being can't be measured, only understood. Being, or let me say, what is real in the world, is infinite, intransitive, and independent of our knowledge. But our knowledge again is finite, transitive, and contextual. This is important for the further analysis I will be introducing.

Our knowledge is formed through social interactions in the world and the material transactions between us and the world. In education, if we only focus on what can be observed as events in the empirical domain, we are detached from reality. We can be wrong in our understanding of reality: being right or wrong about things does not change how the world is. This is the epistemic fallacy, or that knowledge is fallible, which leads to the critique of Dewey's transactional theory of knowing, based only on the experiences and "effects" of our actions.

In critical realism, therefore, we seek to evaluate and *justify* knowledge through the acknowledgement of all three domains of the ontological reality. This is called the commitment to *judgemental rationality*. Judgemental rationality is not a naïve claim to make. It is a binding commitment related to ethical responsibility in research, based on which theories can be judged as better or worse.

Knowledge, says Russell, is justified true belief. When we discuss content in curriculum and the purposes of education, epistemic relativism means that knowledge must be justified based on the inquiry for truth. Competency-based training, the dominating theory for contemporary VET, is no exception.

Margaret Archer, the mother of social realism, says that social sciences must come in a "sack", including structure, agency and culture (SAC) (Archer, 1995). Critical realists hold that no priority is given to either of the components in the sack.

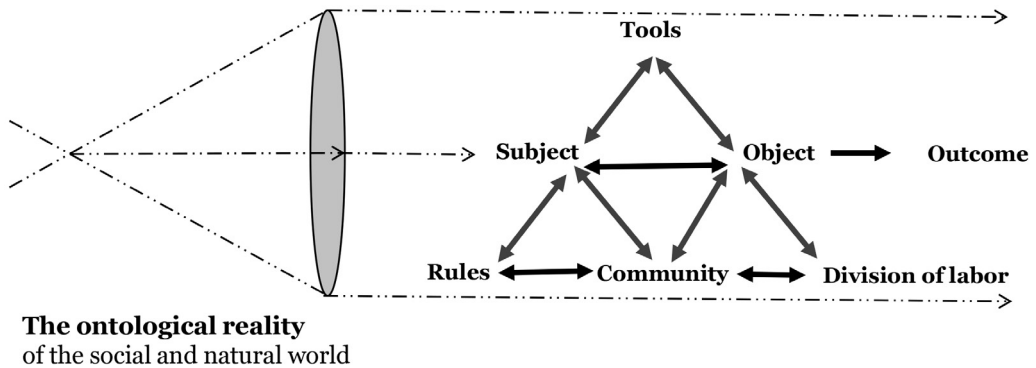


Figure 3. Utilising the lens of critical realism to activity theory.

Let me give a few examples of why education and economics can't escape the metaphysical premises about the nature of the world. These examples will explain why depth-ontology analysis based on judgmental rationality is needed. Let me set the scene through Baskar's discussion about war. War is not only about bloody killing but also about the dreadful strategies of men in power. War builds social structures like walls. Walls, which causal mechanisms in the domain of real materialise as death or worse: human suffering in torture, rape, enslavement.

We must assume structure, agency, and culture are real. And we must now understand that the causes of structures and material mechanisms are real, too, even though they, to a wide extent, are invisible to us. Otherwise, we couldn't kill each other or do good. Bhaskar's point is that the decision to do harm or good is not always our own to make.

The sack is also part of professionalism and work settings. Social structures are producing inequalities related to gender, social class, the neglect of knowledge, and so forth. We have the agency to act. And we act differently in different cultures. This is why reality is more than meets the eye.

While doing ethnographic fieldwork, I met people who had experienced war. One man, for example, came to talk to me one day. He asked if I was writing a book about VET. And when I said yes, he wanted to show me something. He showed me the most incredible dragonfly he had made. Inside the steel frame was a beautiful combination of deep blue and green of some sort of glass. It's not particularly the one in the photo [in the presentation], but it's close. He said his counsellor and the teacher in the VET school let him work with this piece for quite some time, although this wasn't a part of his training. The competency-based qualification requirements couldn't identify the dragonfly or his situation as a refugee. Neither could he get himself a place for work-based learning; racism in practice, that is.

He said this work will always remind him of his time in Finnish VET, which taught him about friendship, materials, work methods, and dignity. I repeat that, dignity.

My point is that we are not only about performance and actions assessed by the effects of our doing observable as knowing in the empirical domain. In contrast, we are part of something more. First and foremost, we are neither isolated nor insensible.

While doing fieldwork, I also met nurses – vocational teachers – who had counselling responsibilities for healthcare students. They said that when working with patients, they encounter humans and the world; they seldom think about outcomes and even less about documentation. As such, desired outcomes cannot inform their professional practices. For example, when they hold newborn children in their arms, eyes are opened to a new reality and a world greater than anything – about human flourishing. But, sometimes, newborn children die. This is the infinite depth of the nature of the world: what is human is social, but what is human is also body, materia, and metaphysics. These are located in the domain of real; they exist; they can make people suffer, and there's not much to do about that (see, Sayer, 2011). The uniqueness of situations in professional work cannot be standardised: competency-based training somehow misses that. To give justice to Donald Schön and Ruhi Tyson's argument for practical wisdom, responsible action cannot be mapped in qualification requirements (Schön, 1983; Tyson, 2017).

My last example is from my previous work as a teacher in electrical engineering: this is about the role of theoretical knowledge in the vocational curriculum. Before training in cable installation and planning, VET teachers emphasise the need to understand the fundamental causes of physics, which principles are about theoretical knowledge, not knowing in practice. Without access to theoretical knowledge, VET students of electrical power systems are not only dangerous for themselves; they risk others' lives based on electric shock and fire.

Today, the splintered bits of “knowing that” have conflated all boundaries of VET, not just the empirical assessment part but also pedagogical and relational work and policy. There are educational situations if we want

work to be effective, responsible, and fair. At the same time, competencies have no role in blurred situations in the real world. The reason for that is that competencies are fragments of the instrumental dimension of the empirical domain. Fragments that are readily made measurable form bits that can be managed in whatever context and applied to whoever individual. In this sense, the individual is detached from personhood and reality.

Responding to the point of justification, competencies exclude objects of knowledge from being portrayed, and knowledge-laden agency fails. So please, this leads to my thesis: that competency-based training gained the power to make VET less educational and less vocational at the same time. Professor Leesa Wheelahan suggests we must ensure that students get access to theoretical tools of trade (Wheelahan, 2023). It is beyond the empirical ontology to do so, which is why new theories for VET are needed.

## References

- Allais, Stephanie (2014) *Selling Out Education: National Qualifications Frameworks and the Neglect of Knowledge*. Sense. <https://doi.org/10.1007/978-94-6209-578-6>
- Archer, Margaret S. (1995) *Realist Social Theory: The Morphogenetic Approach*. Cambridge University Press.
- Bhaskar, Roy (2008 [1975]) *A Realist Theory of Science* (First published in 1975: With a new introduction in 2008 ed.). Routledge.
- Edwards, Anne (2007) Relational agency in professional practice: A CHAT analysis. *Actio: An International Journal of Human Activity Theory*, 1, 1–17.
- Engeström, Yrjö (2014 [1987]) *Learning by expanding: An activity-theoretical approach to developmental research*. Cambridge University Press. <https://doi.org/10.1017/CBO9781139814744>
- Engeström, Yrjö (2018) *Expertise in Transition: Expansive Learning in Medical Work*. Cambridge University Press. <https://doi.org/10.1017/9781139023009>
- Engeström, Yrjö (2000) From individual action to col-

- lective activity and back: Developmental work research as an interventionist methodology. Teoksessa Paul Luff, Jon Hindmarsh, & Christian Heath (toim.) *Workplace Studies: Recovering Work Practice*. London: Cambridge University Press. <https://doi.org/10.1017/CBO9780511628122>
- Kettunen, Pauli (2013) Vocational education and the tensions of modernity in a Nordic periphery. In Mette Buchardt, Pirjo Markkola, & Heli Valtonen (eds.) *Education, state and citizenship*. NordWel Studies in Historical Welfare State Research 4, 31–55. Nordic Centre of Excellence Nordwel.
- Miettinen, Reijo (2000) The concept of experiential learning and John Dewey's theory of reflective thought and action. *International Journal of Lifelong Education* 19 (1), 54–72. <https://doi.org/10.1080/026013700293458>
- Russell, Bertrand (1946 [2004]) *History of Western Philosophy*. Routledge.
- Sayer, Andrew (2011) *Why things matter to people: Social science, values and ethical life*. Cambridge University Press.
- Schaffar, Birgit (2021) Competent uses of competence: on the difference between a value-judgment and empirical assessability. *Nordic Journal of Studies in Educational Policy* 7 (2), 55–64. <https://doi.org/10.1080/20020317.2021.1958993>
- Schön, Donald A. (1983) *The reflective practitioner*. Basic Books.
- Tyson, Ruhi (2017) *The rough ground: Narrative explorations of vocational Bildung and wisdom in practice* Stockholm University]. Stockholm.
- Vehviläinen, S. (2014) *Ohjaustyön opas: yhteistyössä kohti toimijuutta* [A guide to counselling: in collaboration toward agency]. Gaudeamus.
- Vehviläinen, S. (2021) Itseohjautuvuudesta osallisuuteen: Ohjaus Aikuiskasvatuksessa vuosina 1996–2021 [From self-governing to participation: Counselling in adult education 1996–2021]. *Aikuiskasvatus*, 41 (4), 355–365. <https://doi.org/10.33336/aik.112757>
- Wheelahan, Leesa Mary (2023) Realism and theorizing curriculum—the role of knowledge. In *International Encyclopedia of Education (Fourth Edition)*, 85–95. <https://doi.org/10.1016/b978-0-12-818630-5.03012-8>