Narrowing the definition of Networked Learning: A demarcation from the learner centred perspective

Lisa Brandstedt

Mid Sweden University, lisa.brandstedt@miun.se

Abstract

This is a conceptual-philosophical paper and its intention is to address the issue of the definition of Networked Learning which is currently under discussion within the Networked Learning Editorial Community and revolves around the intellectual foundations on which the concept of NL rests. These intellectual foundations are according to some, myself included, overly inclusive and would benefit from some demarcation. This paper suggests such a demarcation through the dissociation of NL from the cognitive constructivist learner-centred perspective on education, which would define Networked Learning more clearly with respect to other adjacent research communities and educational concepts (e.g. Learning Sciences). The dissociation from learner-centrism is argued for on epistemological, pedagogical, and ideological grounds within the context of formal education, and a content-centred perspective is suggested in its stead.

Keywords

Cognitive constructivism, Content-centrism, Democracy, Formal Education, Learner-centrism, Philosophy of Education, Traditionalism.

Introduction

Education as an academic discipline can historically be understood as a field of tension between three major lines of thought, as conceptualized by Egan (1997). These three can be interpreted as focalizing each of the three components of the "holy trinity" of education, respectively: the teacher, the knowledge and the learner. The first educational tradition, which Egan calls ‘socialization’, is the schooling tradition in which the “central task … is to inculcate a restricted set of norms and beliefs – the set that constitutes the adult society the child will grow into” (Egan 1997, p. 11). This pedagogy corresponds to what is nowadays oftentimes derogatorily called teacher-centrism. A parallel can also be drawn to Lefebvre's term 'dressage', referred by Selwyn (2014) and explained as "implying a process of repetition and the individual being 'broken in' like an animal, and therefore being shaped to the accepted values of a wider society or group", (Selwyn 2014, p. 97–98).

The second tradition that Egan (1997) describes, originates from the platonic idea that the goal of education should instead be to create minds that “transcend conventional beliefs, prejudices, and stereotypes of the time and come to see reality as it really is”, and doing so by initiating learners to “the great cultural conversation” which has been going on ever since the beginning of civilization and which only academic knowledge can give full access to, a kind of knowledge which “is valued less for its social utility than for its presumed benefit to the mind of the student” (Egan 1997, p. 13–15). Education should thus lead to an understanding of how one is situated in the history of mankind. This perspective has lived on through modern traditionalists such as R.S. Peters (Degenhardt, 2010; Peters, 1966). With this outlook neither the teacher nor the student is the focus of attention but the knowledge, or the content.

The third tradition is the child or learner -centred tradition, and the first seed for this perspective was planted when Rousseau with his famous ***Émile, or On Education***, reacted to the platonic idea of the cultivation of mind, and instead proposed that we ‘go back to nature’ and let her guide our quest for knowledge. The tradition further evolved through Spencer’s and Dewey’s progressive pragmatism and Piaget’s and Papert’s cognitive constructivism (Egan, 2002). The idea here is that learning needs to go from the familiar to the unfamiliar, from the concrete to the abstract, from practice to theory, and not the other way around. The learning process is thought of as a reflection of the scientific method, where the learner gains knowledge about her world

through experience, exploration and active inquiry and from this, builds, tries out, and refines her understanding of how things are, and knowledge is valued by its practical utility and personal relevance.

The first, teacher-centred tradition, or as Peters (1966) called it 'the moulding model', has some unattractive connotations of indoctrination and few educationalists of today are likely to defend it. But the other two are still being debated and they are incompatible with one another. Of course, it should be recognized that content-centrism is more prominent within the humanities and learner-centrism is more associated with the STEM[1]-subjects, but in the field of pedagogy these two are in a sense competing for the title of Grand Theory and scholars of both traditions are making claims to explain all of learning. They are in a sense, for pedagogy what quantum mechanics and general relativity are for physics, they both seem to hold when scrutinized in isolation, but contradict each other when compared. Therefore, either one or the other is eventually going to have to conform to fit the other or both will have to go (which is as unlikely in pedagogy as it is in physics). However, in reality few pedagogues have a teaching style which is a hundred precent either learner or content centred but a mix between the two, as Egan underscores. In fact, according to Egan the confusion between these initially three contradictory perspectives, which I have here taken the liberty of reducing to two is the most profound problem we have within education. Degenhardt (2010) similarly writes of a "…knowledge-centred vs. child-centred divide that has developed in education since the eighteenth century." (p. 126).

A possible but not necessarily exclusive conception of a “learning network” is the mental network of connections and relations between instances of knowledge which is the result of learning. With this conception, the learner-centred view would be that this network is ***constructed*** piece by piece, by each unique learner as they interact with the world. The content-centred view would be that this network is ***revealed*** piece by piece to the learner as they gather information about the world, since it already exists irrespectively "outside" of the learner as the fabric of socio-cultural history, though understanding and personal opinion of it may vary depending on individual perception. As it is currently posited, the intellectual foundation of Networked Learning incorporates both of these opposing perspectives, which may cause confusion within the community. Networked learning is an educational idea which rests on the power of human communication and at the centre of human communication for learning, there is of course a topic of discourse, a content, around which participants – teachers and students – can gather. Therefore, I argue that NL in the context of formal education, should be defined as a content-centred learning concept. Table 1 gives a summary of the two perspectives.

Table 1: A summary of the general characteristic differences between learner-centrism and content-centrism, loosely based on Egan, 1997 and 2002.

	Learner-centrism	Content-centrism
General idea	Learning as a reflection of the scientific method: exploration, experimentation, hypothesizing and testing leads to personal theory building and to gaining personally relevant knowledge	Learning as a recapitulation of human development through cultural history: General theories and academic knowledge are studied for their cultivating effects on intellect and for guiding practice
Teacher Focus	The structure and significant features of the mind of the learner	The structure and significant features of the subject content
Didactic approach	Active inquiry Learning-by-doing Hands-on practice Understanding through experience	Explicit instruction Intellectual tools for understanding Reflection and contemplation Understanding through imagination
Learning metaphor	The jigsaw puzzle: a picture is built piece by piece (atomistic view)	The camera lens: the whole picture gradually comes into focus (holistic view)
Value of knowledge	Practical utility for individual and society	Empowerment from cultivation of the mind

Discussion

Since these two perspectives have a long history, they have been called by various names other than the ones I have chosen to use here. Cunningham and Allen (2010, cf. Cronje, 2006) describe these two "major epistemological perspectives" as such: "…the first is objectivism, also known as realism, which is the view that

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knowledge is produced by the impact of external reality onto the senses; the second is constructivism, also known as pragmatism, which is the view that knowledge is created through the meaning making activities of each person's mind." (p. 486). From this description it becomes obvious why scholars of the learner-centred tradition believe that the main concern of education research is to understand the psychology of the mind and how people learn, whereas scholars of the other tradition are more prone to begin with the rather philosophical question of what people need to know about. Invoking science is always to make a stronger truth claim than that of a philosophical argument, and stronger claims of course require stronger evidence. However, as argued by Reagan (2006; 2010), much of what goes by the name of educational psychology is no less metaphorical in its discourse than purely philosophical discussions of education. Indeed, it cannot be denied that knowledge, by definition, cannot exist outside the mind of a knower and hence cannot be transferred from another mind or any other external source, and thus must be constructed by each individual learner in some sense. However, constructed and created are not the same, as Vygotsky points out, using his favourite example of language acquisition:

> How did you and I develop our power of speech? After all, we did not create this speech by ourselves. Humanity created it during the entire course of its historical development. My own development consists of the fact that, during the course of my general development, I mastered this power of speech following the historical laws of my development and through the process of interaction with the ideal form. But can you imagine what would have happened if I had found myself in the same circumstances as a deaf child, where I would have had to create my own language? I would not have been able to make use of the form which has been shaped during the course of the development of humanity. I would not have got very far, I would have created speech whose dimensions would have been very primitive, elementary and circumscribed. (Vygotsky, 1994, p. 352).

Just as the content-centred 'objectivist' realizes that understanding and remembering are not transferrable objects, so does the cognitive constructivist of course realize that knowledge does neither simply appear in isolated minds without interaction with something or someone else. The latter does however tend to refute secondary accounts such as literary sources of information and insists that learning must be a first-person experience and a personal discovery. This reasoning has strong roots in Rousseau, who would not let his fictional pupil Émile read any books, instead he was to learn and understand from personal experience. One telling example is how Émile and his tutor covered the subject of astronomy by observing the movement of the sun and the shadows it produced, instead of reading about it in a book. However, this is a romanticised and unrealistic picture which ignores that it took several of humanity's most prominent thinkers, centuries upon centuries of meticulous systematic observation and analytic work, to form the astronomic theories we now teach and have easy access to in our libraries. What Émile's tutor could perhaps have induced in him through this practice is a curiosity for astronomy, but anything but a very shallow understanding of the celestial objects and processes is impossible to acquire from observation alone, since most of what we now know about the subject was discovered theoretically and is not directly observable. And I am afraid the same may be the case for most other subjects.

Much of the discovery- or inquiry-based learner-centric educational ideas, derive from a desire to mimic 'natural learning', that is, the way learning happens in the real world of active doings and interaction with things in the environment, outside of the artificial world of the school and its supposedly passive and unnatural reading and writing. Procedural knowledge is favoured over propositional knowledge and thus it is believed that classrooms ought to be re-modelled as active learning environments or so-called 'makerspaces'. But being an active learner does not necessarily entail interacting 'hands-on', with the physical environment, reading and writing can be just as active an exercise with the right didactics, and it is highly questionable whether active learning areas really provide a more accurate account of the 'real world' than a literary narrative could. The exploration of one’s spatial environment to gain personal experience gives a very restricted, or in Vygotsky's words, primitive, elementary and circumscribed, view of the world. But humans are not bound by these restrictions as are the rest of the animal kingdom, since we have evolved into socio-cultural beings with a mind capable of imagination thanks to language, which allows us to transcend and go far beyond our immediate surroundings, through literature (Egan, 1997). This uniquely human and powerful ability of imagination makes it possible for us to theorize and reason, to imagine more than one perspective and predict counter arguments which would challenge our own position, to ask ourselves critical questions, to meta-reflect etc. even in conversation with none but ourselves.

Vygotsky (1934/2012) would describe the process of mastering this ability as the transition from thinking via inter-personal, external speech, to thinking via intra-personal, inner speech. With his “theory of the interaction of ideal and rudimentary forms” (Vygotsky, 1994, p. 351), a sort of sub theory within the socio-

cultural framework, Vygotsky states that the environment is the very source of development. But an important distinction from other environmentalist theories is that Vygotsky does not argue for interaction with the environment per se, but for interaction with the ideal form, which in turn can only be found in the environment. Important to notice however, is that 'the environment' is here to be understood in a very broad sense as all that is not hereditary, which is a lot more than just one's physical surroundings at a given moment. The reason is that 'higher-level' and characteristically human traits and activities are socio-cultural by their nature, meaning that they have been developing socially and culturally over the ages along with humanity at large. Ideal forms are not inherited genetically, they are internalized from a source outside of the learner, i.e., somewhere in the environment. However, if interaction with the environment is to lead to development – in other words progression towards the ideal form – a crucial requirement is that said environment carries in it this ideal form. Just interacting actively with others, in other words behaving socially, will not lead to development if those others do not represent the ideal form, or at least a higher form than the learner's initial form. The problem is that many pedagogues and scholars who use the expression "all learning is social" with reference to Vygotsky, tend to also indicate the reversed relationship: "all social interaction equals learning". While this may in some sense be true, it is nevertheless a misunderstanding of Vygotsky and his theory, because socio-cultural theory does not concern all of learning, but particularly human learning. Being social is not specific to humans, all animals are social and learn from interaction with each other, even insects exert such behaviour. Therefore, all learning may be social, but only human learning is cultural, and it is this cultural learning that is the main concern of organized education. The point is that 'natural learning' of 'natural knowledge' does not require any education and consequently no education research either, because it simply happens by itself. It is the unnatural knowledge of culture, that requires organized education with its unnatural learning methods.

The role of the environment in socio-cultural theory is that for to develop socio-cultural knowledge, skills, and behaviour, the learner will need an environment in which he or she can interact with role models of such knowledge, skills, and behaviour. A problem with the learner-centred and self-regulated - verging on anti-teaching - pedagogy, is that the teacher as a role model who personifies and exerts the ideal forms has, more or less, been taken out of the equation. The teacher as role model has mistakenly been confused with the teacher as authority. And with literary role models also restricted, students will have very few sources left for inspiration and guidance. Instead, students are expected to direct themselves and inquire their way to understanding. This places the responsibility on the learner to know what they do not know, to know what to ask about and what would constitute an answer. However, these abilities are not the road to knowledge, they are the result of knowledge, as problematized by Plato in Meno. It cannot be the responsibility of the student to be aware of what they do not understand and why, this must be the responsibility of the teacher (cf. Laurillard, 2002; Selwyn, 2014; 2016). An objection could here be made that Networked Learning is a concept that extends beyond school into a lifelong learning enterprise which will not always include a teacher. However, I would argue that the notion of a lifelong learner complies better with the image of a person who continuously covers more and more content knowledge in a growing number of domains throughout his or her life, than with the image of a person who effectively masters a few supposedly general basic skills such as 'problem-solving', 'critical thinking' and 'autonomy' and is then believed to be ready for any and all of life's challenges.

In addition to epistemological and pedagogical problems, the learner-centric tradition also carries with it an individualistic ideological luggage which stands in strong contrast to the overall agenda of Networked Learning as stated by its current general description:

> Networked learning involves processes of collaborative, co-operative and collective inquiry, knowledge-creation and knowledgeable action, underpinned by trusting relationships, motivated by a sense of shared challenge and enabled by convivial technologies (NLEC, 2021a).

While it is important to avoid repeating the mistake of Hegel and Marx who, according to Peters in their "collectivist, holistic approach to social phenomena tended to go to the other extreme of ignoring the importance of individual centres of experience" (1966, p. 49-50), it is equally important to remember that the notion of democracy only has meaning to humans as collectives and is irrelevant to isolated individuals. A recurring word in the recent discussion about how to redefine Networked Learning is 'emancipation' (NLEC, 2021a; 2021b), which stands for one of many of NL's, in my opinion, noble ideals because it acknowledges the beauty of education and knowledge when they are valued for their own sake rather than as an economic investment or just a means to some other practical end. However, in the backwaters of a misconstrued romanticist notion of nature as more pure, more real and altogether better than culture, emancipation has come to mean something else in learner-centred lines of thought. Educational emancipation has come to be interpreted as liberation from centralized regulation and from demands of conformity to the common, rather than liberation from the shackles of ignorance and an invitation to join the intellectual conversation of society. The concept of Networked Learning carries in it the acknowledgement that the power of knowledge derives from the very fact that it is

shared and agreed upon by a community in which it is validated by some shared frame of reference. When knowledge becomes individualized and knowledge production is distributed and privatized, it unfortunately becomes diluted, which deprives it of much of its value and strength, and consequently its emancipatory power. In learner-centred thinking on the other hand, an emancipated student is a self-driven student, independent from the teacher and seemingly any social obligation. The ideal of education is that it is 'customized' or 'personalized' to suit any individual preference and this whole discourse is paradoxically euphemized as 'democratic education'. This individualistic view is certainly prominent in Dewey's ***Democracy and Education*** (2016/2018) where he strictly separates the individual from the centralized social institution and relates the two with words like 'obedience' and 'submission', which have obvious negative connotations. In more recent times this capitalist line of thought has become especially associated with technology's role in education and society (Eldred, 1995/2015; Selwyn, 2014; 2016).

It is high time that the creed of democratic education is reclaimed from this distorted conceptualisation. Educating to let the individual know that they are part of something larger than themselves is certainly no less democratic than educating to create self-centred individuals who understand the world only from their own limited personal perspective and who is driven by a competitive neo-liberal motive rather than the notion of a socially shared challenge and the associated social responsibility which is the intention of Networked Learning.

Final Remarks

I am aware that the educational tradition I am advocating has long been accused of being conservative and elitist, for reproducing the past rather than inventing the future, and oftentimes has the whole enterprise of formal education been contaminated by this bad reputation because of it. To some this may not resonate well at all with the Networked Learning ideal, since this perspective pictures the university rather like an Ivory Tower, the very image which the network model hopes to replace (Toft Nørgård et al., 2019). But paradoxically, such discourse neglects the fact that one of the main purposes – if not the main purpose – of organized formal education is to do precisely that: to preserve what humanity holds to be culturally valuable, to pass on what we have come to know over the ages and how we learned it, which includes our greatest discoveries as well as our gravest mistakes, because that knowledge is a necessity for the next generation to be able to improve upon our culture, as Peters had already realized some seventy years ago:

> In recent times it has been fashionable to attack the old view, associated with the moulding model, that education is concerned with the transmission of a body of knowledge. Stress is placed instead on critical thinking, individual exploration and experimentation. This emphasis was salutary enough at a time when bodies of knowledge were often handed on as 'inert ideas' and without any attempt being made to hand on also the public procedures by means of which they had been accumulated and could be criticized and revised. But it is equally absurd to think that procedures can be handed on without content. Critical thought is vacuous without anything concrete to be critical about and there are as many brands of 'critical thinking' as there are disciplines. In the various modes of thought such as science, history and philosophy there is a great deal to be known before the peculiar nature of the problem can be grasped. The procedures of a discipline can only be mastered by an exploration of its established content under the guidance of one who has already been initiated. (Peters, 1966, p. 53-54).

Perhaps an information age needs an information authority. In a time of alternative facts, deep fakes and all sorts of disinformation spreading, a sturdy and trustworthy centralized Ivory Tower, connecting the networked nodes of society, is perhaps just what people need and expect the university to be.

References

Cronje, J. (2006). Paradigms regained: toward integrating objectivism and constructivism in instructional design and the learning sciences. In ***Educational Technology Research and Development***, 54(4), pp. 387–416.

Cunningham, C. A. & Allen, B. L. (2010). Philosophical Questions about Learning Technologies. In R. Bailey, R. Barrow, D. Carr & C. McCarthy (Eds.). ***The Sage Handbook of Philosophy of Education*** (pp. 481–502). Sage Publications.

Degenhardt, M. A. B. (2010). R.S. Peters: Liberal Traditionalist. In R. Bailey, R. Barrow, D. Carr & C. McCarthy (Eds.). ***The Sage Handbook of Philosophy of Education*** (pp. 125–138). Sage Publications.

Dewey, J. (1916/2018). ***Democracy and Education*** (1st ed.). EdTech Books. Retrieved from https://edtechbooks.org/democracyandeducation

Egan, K. (1997). ***The Educated Mind – How Cognitive Tools Shape Our Understanding***. The University of Chicago Press.

Egan, K. (2002). ***Getting it wrong from the beginning – Our progressivist inheritance from Herbert Spencer, John Dewey and Jean Piaget***. Yale University Press.

Eldred, M. (1995/2015). ***Capital and Technology – Marx and Heidegger.*** CreateSpace Independent Publishing.

Laurillard, D. (2002). ***Rethinking University Teaching – A framework for the effective use of learning technologies*** (2nd Edition). Routledge.

Networked Learning Editorial Collective (NLEC). ***Networked Learning: Inviting Redefinition***. Postdigit Sci Educ 3, 312–325 (2021a). https://doi.org/10.1007/s42438-020-00167-8

Networked Learning Editorial Collective (NLEC)., Gourlay, L., Rodríguez-Illera, J.L. et al. Networked Learning in 2021: A Community Definition. Postdigit Sci Educ 3, 326–369 (2021b). https://doi.org/10.1007/s42438-021-00222-y

Peters, R. S. (1966). ***Ethics and Education.*** Routledge.

Reagan, T. (2006). Learning theories as metaphorical discourse: Reflections on second language learning and constructivist epistemology. In ***Semiotica,*** 116, 291–308. https://doi.org/10.1515/SEM.2006.067

Reagan, T. (2010). The professional status of the teacher. In R. Bailey, R. Barrow, D. Carr & C. McCarthy (Eds.). ***The Sage Handbook of Philosophy of Education*** (pp. 209–221). Sage Publications.

Selwyn, N. (2014). ***Distrusting Educational Technology - Critical Questions for Changing Times***. Routledge.

Selwyn, N. (2016). ***Is Technology Good For Education?*** Polity Press.

Toft Nørgård, R., Mor, Y. & Bengtsen, S. S. E. (2019). Networked learning in, for, and with the World. In A. Littlejohn, J. Jaldemark, E. Vrieling-Teunter & F. Nijland (Eds.). ***Networked Professional Learning – Emerging and Equitable Discourses for Professional Development***. Springer.

Vygotsky, L. S. (1934/2012). ***Thought and Language.*** MIT Press. [In English, original title Myšlenie i reč].

Vygotsky, L. S. (1978). ***Mind in Society - The development of higher psychological processes***. M. Cole, V. John-Steiner, S. Scribner & E. Souberman (Eds.). Harvard University Press.

Vygotsky, L. S. (1994). The problem of the environment. In R. Van der Veer & J. Valsiner (Eds.). ***The Vygotsky Reader*** (pp. 338-354). Basil Blackwell Ldt.