

Promoting agency and identity building in dialogic learning communities online

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Abstract

For several decades educational institutions and their educational designers have waited for a significant innovation and pedagogical breakthrough in digitally based teaching and learning (Bates, 2015; Bruce, 2016; Conole, 2013; Tait, 2013; Sorensen & Brooks, 2017). New innovative approaches and pedagogies were expected in design of teaching and learning; approaches which, methodologically, would acknowledge basic human qualities and inter-human co-existential virtues and functionalities. Such approaches, as e.g. dialogue, collaboration, communication, creativity, improvisation, may be viewed to be relevant to any topic addressed, as pertinent values for developing and empowering robust identities. However, as it stands, new and innovative pedagogical paradigms for teaching and learning seem to have stagnated. The authors of this paper make a plea for the use of fundamental human concepts, features and inter-human functionalities - such as e.g. a focus on concepts of relational agency, dialogue and dialogic, identity, which may produce very fruitful teaching and learning processes through restoring, implementing and operationalizing fundamental motivating principles of development processes of the human nature.

This paper reports on an explorative study of the learning dialogue in an online module, one module of an online master's part-time program in Ict and Learning. The philosophy behind the design and organization of the program is inspired from the Project Oriented Project Pedagogy (POPP) approach, introduced at Aalborg University (AAU) at its very birth in 1974. The paper focuses on the use, role, potential and implications for teaching and learning when using a digital dialogic learning pedagogy built on the basic principles of POPP and unfolding in virtual learning environments. Through the analytical lenses of the theoretical concepts such as "identity" and "agency", the authors set out to explore the extent to which online dialogues and potentially identified signs of developed identity, and agency in learners, may promote inclusion and contribute as very important meta learning values for the cultivation of awareness in citizens in our future global society.

The analytical optic is formed from a perspective of some key concepts of theorists, such as the notion of "relational agency" by Edwards (2006 & 2007), the notion of "dialogic" by Wegerif (2007) and the idea of "co-creation" (Sanders, 2008). The methodological approach is inspired by the principles of Netnography¹ and is a continuation of the authors' series of earlier studies on inclusive online learning dialogues and their implications for learning in digital environments (e.g. Sorensen & Brooks, 2017).

The findings of this study suggest that for networked learning of including quality, co-creation, identity and relational agency are important elements for learners to obtain and be exposed to. All of these concepts appear very close to the essential aspects of human nature.

Keywords

Learning Design (LD); Digital Dialogue (DD); Inclusion; Collaborative Knowledge Building (CKB); Learning2learn (L2L); Agency; Identity; Co-creation; Metalearning; Networked learning; Empowerment

1. Introduction

For several decades educational institutions and their educational designers have waited for a significant innovation and pedagogical breakthrough in digitally based teaching and learning (Bates, 2015; Bruce, 2016; Conole, 2013; Tait, 2013; Sorensen & Brooks, 2017). New innovative approaches and pedagogies were

¹ Netnography uses these conversations as data. It is an interpretive research method that adapts the traditional, in-person participant observation techniques of anthropology to the study of interactions and experiences manifesting through digital communications (Kozinets, R. V, 2010)

expected in design of teaching and learning; approaches which, methodologically, would acknowledge basic human qualities and inter-human co-existential virtues and functionalities. Such approaches, as e.g. dialogue, collaboration, communication, creativity, improvisation, may be viewed to be relevant to any topic addressed, as pertinent values for developing and empowering robust identities. However, as it stands, new and innovative pedagogical paradigms for teaching and learning seem to have stagnated. The authors of this paper makes a plea for the use of fundamental human concepts, features and inter-human functionalities - such as e.g. a focus on concepts of relational agency, dialogue and dialogic, identity, which may produce very fruitful teaching and learning processes through restoring, implementing and operationalizing fundamental motivating principles of development processes of the human nature.

One of the basic preconditions in such ambition is the dimension of real-life relevance. Since 1974 real-life relevance in the shape of authentic real-life problem identification and real-life problem orientation has been an ingrained key factor in the founding of AAU - not only pedagogically, using Problem Oriented Project Pedagogy (POPP), but also manifested in the physical design of AAU, in both buildings and spaces (Kjersdam & Enemark, 1994). POPP was the pedagogical foundation for establishing Aalborg University (1974) and Roskilde University (1972) in Denmark (. It represented a radical change in the teaching and study methods applied at that time. The emphasis shifted from one, where a model based on delivery of information and knowledge was a priority, to one where a critical, and experiential pedagogy favoring learning as shared knowledge construction through genuine collaboration was favored (Kjersdam & Enemark, 1994). In the late 1980s, continuing education programs at AAU and research within the field of learning in virtual learning environments (VLE) were also based on the POPP approach. The POPP approach offered a great potential in terms of creating fruitful learning designs and practices with VLEs, not least because of the possibility to work holistically with real-life problems and of integrating work experiences and theoretical perspectives with methodological reflections (Kjersdam & Enemark, 1994).

The master program of the present study constitutes an example of a holistic virtual learning design based on the pedagogical concept of POPP. The program is a part-time education, and it is organized as virtual learning. The program functions as a kind of experimental virtual lab, where researchers and teachers together with students explore and do experiments on how to design and practice genuine collaborative learning in virtual learning environments (Dirckinck-Holmfeld, 2012). Earlier research on this program includes studies on the virtual processes of project work (based on the POPP principles), studies of virtual didactics (including teacher-learner roles and power issues), studies on virtual tools to enhance both individual and collaborative aspects of learning (e.g. virtual portfolios), studies on patterns of collaboration, and general studies on the quality of the design of the virtual learning process. One of the authors is also the designer and teacher on the course.

More recently, the authors have initiated research trying to understand engagement and motivation, and addressing the implications of a view of “dialogic” (Wegerif, 2016 & 2006) for establishing and maintaining learner engagement and motivation (Sorensen & Brooks, 2017). Through some new theoretical notions presented in this paper, the authors are adding new perspectives and insights into the area of collaborative learning and knowledge construction by introducing the notions of dialogic co-creation of identity, agency, belongingness and social relationships (Edwards, 2006 & 2007). On this background they are humbly approaching a way of understanding and enhancing the quality of online teaching and learning through a dialogic design and methodology approach, unfolding in an online learning architecture, such as Moodle. The authors argue that a design approach sensitive to the inclusive co-creation (Sanders, 2008) and scaffolding of identity, agency and dialogic relations in the collaborative process will strengthen the co-construction collaborative learning process through enhancing inclusion, motivation and authenticity in learners (agents) of the collaborative learning (Andersen & Sorensen, 2016; Edwards, 2006).

Section 2 briefly outlines the compound of theoretical perspectives, forming the analytical optic behind this piece of research. It gives an account of the authors’ collected analytical “gaze” in terms of meta-learning, virtuality, agency and digitality (Kjaergaard & Sorensen, 2016). In section 3 the empirical case for this study is outlined and described in more detail. Section 4 gives an account of the research design and methodology of the study (Kozinets, 1998). While section 5 forms the forum for our research findings and discussion, section 6 wraps up and puts word to the authors’ final remarks.

2. Theoretical perspective

Perspective of relational agency and relational expertise

Edwards and Mackenzie (2005) introduced the concept of relational agency, which they describe as "working alongside others toward negotiated outcomes," providing an alternative to the idea of professionals who are given significance through their ability to work independently (Edwards, 2010, p.61). According to Edwards, (2010), it requires that each professional individual or team is "attuned to each other's purposes and ways of working" (p.61), and how the layers of expertise of each of them are shared.

According to Edwards (2010 & 2011), when professionals work across different individuals or teams to negotiate a goal, two aspects of collaboration come into play. The first is that each individual or team holds a specific expertise, and second, they combine both their core expertise and develop a *relational expertise*. This expertise stems from working across individual or team boundaries and is based on engaging with the knowledge of one's specialist practice as well as the ability to identify and respond to what others offer from their local systems of expertise (Edwards, 2011, p. 33). For example, a group of students with a specific interest in museum studies have developed an expertise of how a museum operates, and its collection, while another group of students holds a different expertise based on their knowledge about team work. Moving across boundaries would ask that each practice identifies and acknowledges the expertise of the other in negotiation. What talk takes place in the boundary space is important and goes back to implicit and explicit mediation and whether one voice asserts a particular meaning at the expense of others (Edwards, 2011).

Edwards use of the concepts of relational agency, and relational expertise brings in Wertsch's (1991) concept of multivoicedness. Each professional individual or team has a social language and its own way of representing reality. Therefore, "it involves drawing on the resources of others and being a resource for others" (Edwards, 2005b, p.9).

How an institution is shaped, correlates to how its meaning is conveyed and represented (Edwards, 2010). The language used by a university education program can create boundaries. How boundaries are negotiated returns to Vygotsky's notion of mediation and Benhabib's (1992) concept of "communicative ethics" (in Edwards 2010, p. 56). The latter points to being aware of the views of others' expertise and being willing to work together towards a shared goal. Edwards (2010), comments, it is the differences that take place in dialogues between practitioners with different cultural histories that can lead to learning. In other words, boundaries create dialogic opportunities.

Perspective of "Dialogic"

Moving learners away from a "monologic" condition in learning into the "space of dialogue", i.e. *engagement in and co-creation of dialogue*, should be considered a medium for learning. But not only that – it should be considered *an end in itself* as it leaves significant indirect "imprints" (meta-learning) on learners in terms of their self-perceptions and radius of action in their process of becoming global democratic citizens. Moreover, there are some significant attractive characteristics of "dialogic", as supposed to "monologic":

The dialogue is never closed, what counts as knowledge is never final, the questions we ask will change, and so, what counts as knowledge is never final. The dialogue is never closed, and because any succeeding reflection will become a new element in the dialogue (Wegerif, 2017).

That something is "monologic" means (according to the Oxford English Dictionary) that everything has one correct meaning in one true perspective on the world. In contrast, that something is "dialogic" denotes according to Wegerif (2017) the idea that 1) knowledge is never direct knowledge of an external world, but emerges always only within dialogue itself - as an aspect of the dialogue itself. It is never direct knowledge of an external world, it always emerges only within dialogue as an aspect of the dialogue (Wegerif, 2016).

Consequently, it seems more important to teach students *how to construct (new) knowledge together with others*, so that they can participate more fully and effectively in ongoing dialogues, than it is to teach them fixed knowledge or so-called facts (Wegerif, 2016). Acknowledging that dialogic teaching draws students into a process of shared knowledge construction (epistemological focus), this means that the primary objective in a context of digital collaborative knowledge building dialogue must be to engage students in sustained stretches of talk. Doing so enables speakers and listeners to explore and build on their own and others' ideas – in the course of, not re-producing, but collaboratively hold different ideas together in the tension of a dialogue, while producing **new** insight - and potentially change our reality (ontological focus).

Finally, it is also worth while mentioning that also Erving Goffman (1972) points out some very basic properties of the general phenomenon of human interaction and dialogue:

(...) a single visual and cognitive focus of attention; a mutual and preferential openness to verbal communication; a heightened mutual relevance of acts; an eye-to-eye ecological huddle that maximizes each participant's opportunity to perceive the other participant's monitoring of him. Given these communication arrangements, their presence tends to be acknowledged or ratified through expressive signs, and a "we rationale" is likely to emerge, that is, a sense of the single thing that WE are doing together at the time. (...). Whether bracketed by ritual or not, encounters provide the communication base for a circular flow of feeling among the participants as well as corrective compensations for deviant acts. [Eklundh, 1986, in Goffman, 1972]

Perspective of meta-learning (values and attitudes)

From a societal perspective, the principled metalearning goal for education is directed towards supporting the development of ethical values and co-existential attitudes (i.e. the development of democratically oriented citizens). Quite a large part of the responsibility for this "development process" concerns the forming of democratically oriented citizens for co-existence of our global society. This type of ethical process takes its point of departure already in the pedagogical methodology, which gets implemented hand in hand with the implementation of digital tools and architectures in educational programmes.

For global citizenship to be cultivated, dialogue is vital (Sorensen & Ó Murchú, 2004). By the notion of "dialogue", and from the view that we need to capture the holistic context of dialogue and negotiation, the authors include a wider understanding of dialogue than the strictly linguistic one. We need to look beyond the actual power of dialogue itself. According to Edwards (2007), we need to include in our understanding of the phenomenon the purpose and conditions of "joint agency" (Edwards, 2007). The process is widely recognized as a general facilitation in processes of learning, regardless of content and topic (Sorensen & Ó Murchú, 2005). Less in focus is the potential of meta-learning (Bateson, 1976; Sorensen, 2007), the learning that is acquired from the methodological level, i.e. "the way things are learned" – in other words, the methodological aspects and learning effects from the methods used to teach/learn a content.

Such methodology plays a significant role for the development of the learner's possible self-understanding in relation to agency (Edwards, 2007), in relation to the forming of identity, for the purpose of growth as a society of democratic citizens, and for the ingrained understanding/fantasy in terms of possibilities for action and the ability and will to critically take a position in the future development of our global society. Therefore, the implications of the choice of pedagogical strategies and methodologies in the virtual environments, which support - or do not support - this development, cannot be overrated.

Perspective of digitality

It is well established knowledge (Sorensen, 2010) that things change when we move from reality to virtuality, a dissolvment of context takes place and changes principles and premises of action - (inter)action (communication), collaboration and co-creation. Three ontological principles are valid in the virtual space (Sorensen & Ó Murchú, 2006): 1) from appearance (being) to representativeness (signs of being). It is only through signs and symbols produced by a learner, that the learner is "present" in the shared virtual environment. A comment, thus, have two functions: a) communicating presence, b) communicating its content; 2) from primarily being involved in interaction to primarily reflecting in interaction. In virtuality the learner cannot interact (make a comment) without at the same time being prompted to reflect at a meta-level about the content of his/her comment. There is no level of (inter)action without a process of reflection (Sorensen, 2010); 3) from involved speech to reflective writing. The move from dialogically composed speech to monologically composed writing is an environmental change, which also contributes to draw and define the basic reflective conditions for learning processes in distributed virtual environments. Contrary to acting in the physical world in which some philosophers view "involvement" to be primary to "reflection" (Heidegger, 1986) - the virtual universe provides a context and an "ontology" in which reflection may be viewed to be primary to involvement (Sorensen, 2006). In essence, the requirement for supporting *meta-communicative awareness* involves the wider concept of mutualness and relational agency, and may have significant implication on the didactic and instructional design.

3. Empirical case: The online master module

The entire Master's program is a part-time master study for professionals, with a value of 60 ECTS extended over two years. The module in question weighs 5 ECTS, and it is the initial module of the entire program. The topic of the module is concerned with learning how to utilize digital technology in design of digital teaching and learning. The programme provides continuing education for working adults engaged in educational planning and digital learning processes at all types of organizations dealing with educational initiatives reaching from schools to various educational organizations, with a need for competence development.

 Meta: Dialog OM modulet

Dette rum er til alle faglige perspektiver på ift modulet. Dette være sig nyt om modulet, info fra undervisere, spørgsmål fra - og diskussioner mellem - studerende, dialog omkring generelle forhold på modulet, etc.

 Læringsteori, erkendelsesteori og ikt-støttet praksis (Gr. 1+2)

Et forum til diskussion af temaet: Læringsteori, erkendelsesteori og ikt-støttet praksis

 Online dialog som metode og laboratorium for læring (gr. 3+4)

Et forum til diskussion af temaet: Online dialog som metode og laboratorium for læring.

 Det refleksive potentiale i digitale læringsnetværk (gr. 5+6+7)

Et forum til diskussion af temaet : Det refleksive potentiale i digitale læringsnetværk


The asynchronous online study process gets interrupted twice per semester by a two-day f2f-seminar. It is a cross-institutional, educational initiative between more Danish Universities, which has been running now successfully for 18 years (Dirckinck-Holmfeld et al., 2012; Fibiger et al., 2004; Sorensen, 2004; Sorensen et al., 2006). The students come from all over Scandinavia, mostly Denmark, a few from Norway, from time to time a person or two from Sweden. Over the years the programme also attracted a few students from Faroe Islands and Greenland. Approximately, 25 students attended this time the explored module, with different backgrounds and representing a diversity of knowledge. A part of them comes from all levels of education, a few come with a background in business. Each year the programme attracts between 20 and 40 participants and provides continuing education for working adults engaged in educational planning and digital learning processes at all types of organizations dealing with educational initiatives reaching from schools to various educational organizations, with a need for competence development. The typical length of a module in the master programme in question is 6,5 weeks.


The prime researcher is also the one responsible for the design of the module. The module explored here is the first one on the Master programme. It is divided into a period of reading and preparation (two to three weeks) and a succeeding period of debate (three weeks). According to the assignment given, the participants, in the two-week preparation period, will read the literature individually. The literature (and other resources) were organized according to the three themes within the course subject, online learning. The themes corresponded to the names of the three discussion fora in the succeeding period of discussion. The participants were asked to distribute a set of roles among the members of their online group (on average consisting of 4 participants).

The meta-forum and the three theme fora used for interaction were:

* A meta-forum to handle communication ABOUT the module (for meta-communication). This is to be used for all kinds of scientific perspectives on the module (læringsteori, erkendelsesteori, og ikt-støttet practice)

* 3 plenum for a to handle the involved communication concerning the topic.

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Figure 1: The meta-forum and the three theme fora to be used for interaction

The three fora used in the discussions concerning the subject were: were supposed to form, support and guide their later discussion and to give the participants a concrete point of departure in the discussion. Some were presenters, others moderators, etc. The description of the roles was clarified in the assignment. Both teacher and students agreed on committing themselves to attending the virtual learning space for a minimum of five times a week over the three weeks of debate. In the debate period each of the groups was asked to present, in the plenum forum belonging to their theme, a commonly agreed problem that was related to the literature (figure 1). They were asked to initiate, conduct and wrap up the succeeding online plenum discussion that evolved from the problem of their group. In parallel with the discussions, the participants and the teacher were engaged in meta-reflections and meta-communication in a meta-forum, to reflect on and discuss the experiences and processes of the participants, as they evolved (figure 1).

The participants were graded, as described in terms of both quantity and quality of their contributions (Sorensen & Brooks, 2017; Sorensen & Takle, 2002; Sorensen et al., 2002), using the a theory-informed assessment model requiring participants to live up to both quantitative (a minimum of 5 comments) and qualitative (a display of different contents) criteria (Sorensen & Brooks, 2017).

4. Research design and methodology

The methodological approach is inspired by the principles of Netnography² and is a continuation of the authors' serious of earlier studies on online learning dialogues and their implications for learning in digital environments (e.g. Sorensen & Brooks, 2017). The empirical bases of the study is constituted by 1) the design of the online learning architecture (i.e. the organizational and pedagogical design of the module), 2) the dialogic interactions and meta-interactions creatively developing and unfolding through students' participation, and 3) the evaluating comments from students on their experience, throughout the process as well as retrospective comments issued at the end of the module.

5. Findings and discussion

The 3 weeks of discussion and debate are usually rather engaging. This year was no exception. The amount of engaged participation among students (many contributions, some of which were of the size of half a webpage). It was a quite exciting and, indeed, very interesting activity to follow and participate in the debate and discussion with the participants. Most contributions turned out to be of very good quality.

It would not be fair to say that the workload of the teacher was reduced in comparison with more traditional face-to-face settings. All expectations as to reduced amount of work were put down. It turned out to be a rather demanding job to read and relate to. There were so many reflective and often very long reflective comments. The discussions were truly participant-centered and participant *empowering*, and the setup was inclusive in allowing for all types of very *different – but equally relevant - contributions and complementary* statements. The dialogic – and *hierarchically flat* in terms of authority and power structures - design produced an enormous amount of relevant – and collaboratively developed - initiatives and perspectives. The motivation of the participants was very high and demonstrated an inclusive attitude and engagement in the discussions far beyond

² Netnography uses these conversations as data. It is an interpretive research method that adapts the traditional, in-person participant observation techniques of anthropology to the study of interactions and experiences manifesting through digital communications (Kozinets, R. V, 2010)

the minimum requirements in terms of quantity. Participants experienced a high degree of ownership and respect, and thus a high level of incitement to *maintain relational agency* and collaborate and act together.

The teacher occupied a role in the discussions equal to the students. Only in the meta-forum, the teacher shifted between the role of a participant and the role of “the expert”. The evaluating comments from the participants documented that, in general, to be participating in the module had been a positive experience. Some participants initially found it to be a stressing experience. The large amount of comments and difficulties in maintaining an overview were stressing. Others expressed the contrasting view that it had been an exciting and stimulating experience to be engaged in and to be sharing an explosion of dynamic exchange and negotiation of meaning. A smaller part of the participants expressed some frustration that the module did not include a more traditional teacher role (the one who knows) and a more traditional student role (the one learns from the teacher). Different asynchronous online dialogues from the course module demonstrate how the students shared experiences based on their different expertise (background) and work experiences. In addition, it was visible how the different dialogic forums (Figure 2), which had clear thematic focuses, provided clear goals and facilitated the students’ way of working. This promoted students’ exchange of thoughts and ideas. For example, within the online forum on “online dialogue as method and laboratory for learning” the students discussed whether “visible participation is a guarantee for learning”. One of the students writes:

So, I have observed that I myself can learn by peripheral participation in online dialogues, but I require my student to participate by being visible in the classroom and active – in other words, visibility becomes a guarantee for learning. This constitutes a dilemma; I don’t think that curriculum should be hidden (Hermansen p. 144). But if I drop the visibility-requirement in a virtual learning environment, why then have one?

This input to the online dialogue resulted in a number of exchanges between three participants who shared their knowledge, work experiences, links to relevant reports, papers, theoretical models, and websites dealing with and extending the issue of discussion. Here, the students demonstrated and combined their specific expertises, they negotiated and collaborated around the topic that was under discussion. In this regard, the notion of dialogic collaborative knowledge building (D-CKB) online with its emphasis on meta-learning and learning-to-learning represents one such choice of “meta-pedagogy” emerges as an interesting aspect of the students’ relational agency. Wegerif (2006) captures the qualities of this choice in the following wording:

The dialogic interpretative framework implies the need for a pedagogy of teaching dialogic, that is the ability to sustain more than one perspective simultaneously, as an end in itself and as the primary thinking skill upon which all other thinking skills are derivative. This pedagogy can be described in terms of moving learners into the space of dialogue. Tools, including language and computer environments, can be used for opening up and maintaining dialogic spaces and for deepening and broadening dialogic spaces. (Wegerif, 2006)




For global citizenship to be inclusive and cultivated, agency, identity and dialogue seem vital components. The power of dialogue in an including learning process is widely recognized as a general facilitation in processes of learning, regardless of content and topic (Sorensen & Ó Murchú, 2006 & 2005). Important seem also implications of a wider contextual understanding of agency in digital dialogue expected to work for inclusion. Less in focus is the potential of meta-learning (Bateson, 1976), the learning that is acquired from the methodological level, i.e. “the way things are learned”. At play here are the methodological aspects and learning effects from the strategies used to teach/learn a specific content. The strategies used play a significant role in the education and self-understanding of the global citizen, as it promotes: 1) meta-learning and learning-to-learn, 2) learning to think (including creativity and imagination), 3) learning to work alongside each other (relational agency), and 4) learning to dialogue.

6. Conclusion

In this paper the authors have made an attempt to elucidate the phenomenon of collaborative online learning through the glasses of “dialogic” and “agency”. Through the use of various theoretical notions, the authors have discussed the phenomenon itself, how it may be understood and utilized in design and delivery, and, thus, the resulting likelihood that the relational energy and motivation latently included in such pedagogic design approach may be fruitful for good quality online learning endeavors. But more studies are needed to support our theoretical position and claims. We need to explore more thoroughly and deeply questions such as e.g. how are including relationships established in digital environments? How is digital relational agency established? If we

assume that inclusive dialogic participation, catalyzed by relational agency and online identity, creates learning, and that online learning designs and architectures are of a better quality, if they are based on theory-informed designs, the authors will tentatively conclude that the future perspectives of a framework centered around inclusive dialogic agency is promising. The experiences described in this study suggest that co-constructed collaborative learning and knowledge are likely to occur. The objective, to stimulate an inclusive collaborative learning dialogue and engaged agency in the learning process, seem to have succeeded in the present context. However, it is difficult to assert in detail, to what extent it is the “forced requirements” on dialogue that stimulate agency and function as kick starter for the engagement, or it is the participant-orientation of the dialogic design. Probably it is a bit of both, together with the request for meta-reflection, meta-awareness and self-reflection.

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