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The Freedom to Learn in Communities: Exploring the Interdependence of Individual and Community Interests

Liat Rahmian & Yotam Hod
University of Haifa, Israel
Liatr123@gmail.com, yotamhod24@gmail.com

Abstract: Individuals and communities often have divergent interests, and therefore it is important to understand their interdependence. In this paper, we frame this issue as the freedom to learning in communities. On one hand, individuals in KBCs are given freedoms to inquire about authentic problems, but on the other hand the community must maintain a coherent knowledge base. To explore these inter-relationships, we examined a uniquely designed KBC in the context of a graduate course where the knowledge that students were advancing about learning was closely tied to the experiential process they were undergoing. Moreover, structured person-centered activities provided reflective opportunities for the community members. Using narrative analysis methods, we elucidate the story of Ziv, a 40-year old physics teacher to show how his interests both shaped and were shaped by the KBC. Our findings point to the importance of ever-deepening interpersonal relationships—providing opportunities for students to see hidden aspects of their own and others’ identities—in the knowledge building endeavor.

Introduction

Today’s society has seen two large trends when it comes to education, both out of the need to create authentic learning experiences for meaningful learning. First, given the easy access to abundant information, there is a need today to focus less on knowledge construction and rather on teaching learners how to learn so they can be self-directed and autonomous (Collins, 2017; Collins & Halverson, 2010). Second, classroom knowledge building communities (KBCs) have become a significant reform movement in education in the last several decades, focusing on advancing a communities’ collective knowledge base (Bielaczyc, Kapur, & Collins, 2013; Scardamalia & Bereiter, 2014). While both of these trends co-exist, they are interdependent. On one hand, how should the community—which has its own norms and requirements—allow the individual’s freedom? On the other hand, how should the individuals—which have their own interests, goals and desires—make meaningful contributions to the community? While these interdependencies between the individual and the community are ever-present, they are an under-researched phenomenon that can shed light on the complex dynamics involved in KBCs (Authors, 2018a). The aim of this study is to elucidate the interdependence that exists between people’s interests to have the freedom to learn and the interests of the community to maintain and advance a coherent knowledge base.

Background

The need for people to explore their own interests as they learn—ideas closely related to the KBC principles of learners’ agency and authentic problems (Zhang, Hong, Scardamalia, Teo, & Morley, 2011)—has been expressed throughout a great deal of research historically. Dewey (1897) was one of the first educational researchers to claim that learning should be based on students’ interests in what is often considered to be a form of discovery learning. In the mid-20th century, Carl Rogers (1969) forcefully advocated for self-directed learning as an essential component of what is known today as the person-centered perspective (Cooper, O’Hara, Schmid, & Wyatt, 2007). Rogers’ famous book, “Freedom to Learn”, is the inspiration for part of the title of this research. Rogers claimed that meaningful, curiosity-driven learning must be based on what a person really needs and wants to know as part of their natural process of growth. It requires facilitating learners to live as “individuals-in-process” by allowing people to conduct themselves “in a delicate but ever-changing balance between what is presently known and the flowing, moving,

altering, problems and facts of the future” (Rogers, 1969, p. 105). The unique interpersonal relationships of unconditional positive regard, trust, and empathy allow everyone in the learning process to deal with their fears, frustrations, and successes, allowing for the “prizing of the learner as an imperfect human being with many feelings, many potentialities” (Rogers, 1969, p. 109).

This trend toward self-direction and freedom continue today. Collins and Halverson (2010) argue that in a society where information is everywhere and easy to reach, students can and do learn outside of school in unprecedented ways (Banks et al., 2007). This is combined with the understanding that education today involves a great deal of responsibility and self-directedness instead of the traditional attitude of schools where everyone “should learn the same things at the same time” (Collins & Halverson, 2010, p. 19). Arguing for customization, learners have the freedom to learn by responding to their different interests, needs, and self-direction to explore questions that are personally meaningful for them. Research on self- and socially-regulated learning (Panadero & Järvelä, 2015), interests (Krapp & Prenzel, 2011; Renninger & Hidi, 2011), and choice (Chin et al., 2019) reflect these notions of freedom.

Creating a Coherent Knowledge Base

By putting ideas in the center, Scardamalia and Bereiter (1994) have theorized KBCs as engaging in an effort of continually advancing the communities’ knowledge. This is done by having the participants take collective cognitive responsibility over the endeavor, where they must be aware of others’ contributions and build-on each other’s ideas as they make distributed contributions to the knowledge base (Zhang, Scardamalia, Reeve, & Messina, 2009). From this standpoint, the work of the community is to not only advance knowledge, but to make sure that it is coherent, understood by its participants, and built-on progressively and carefully. Communities that do not take on such high levels of collective cognitive responsibility could have fragmented knowledge bases, or one’s that are simply not useful. Communities must maintain high standards and gate-keep to make sure that new contributions have integrity.

Communities, of course, can differ on the way they play this gatekeeping role. Lave and Wenger brought up the idea of legitimate peripheral participation (1991) to suggest that the community ought to see these peripheral participants as potential contributors and support them to become central members. Rogoff (1994) talked about how these processes can help the newcomers transform their participation within the communities. In discussing cognitive apprenticeship, Collins (2006) elucidates several different ways that communities could function with regards to the individuals. They may sequence activities from simple to difficult, could model expert practices, and so on. In many ways, we can see the process that the community shapes the individual similar to the way a diamond is created. Diamonds hold a unique potential of shining that need to be exposed, but only after a lot of pressure over many years from the soil onto the rock, can the rock make its contribution to the world.

The Freedom to Learn in Communities

A participant’s freedom to learn, in conjunction with the commitment of learning communities to advance their knowledge, are interdependent and intertwined (Rogoff & Chavajay, 1995). While analysis of learning in such settings typically focus on one or the other, they are both actualized in practice and thus understanding their interdependence requires traversing planes of analysis (Stahl, 2012). This negotiation can be found at the roots of a number of lines of research on learning communities (Brown & Campione, 1994), and is certainly present in state-of-the art conceptions (Herrenkohl & Mertl, 2010; Authors, 2018a). However, this bidirectional dynamic between individuals’ freedom and the effort of the community to advance its knowledge can be better explicated within scholarship on KBCs.

Herrenkohl and Mertl (2010), who examine students from a broad view, look at the way four students’ lived experiences shape and are shaped by their activities within a classroom learning community. For example, the teacher (Glenda) takes a very accepting and welcoming approach towards the students, giving them space to express their ways of knowing, doing, and being within the community. Rich, a student who enters with “at risk” behavioral issues, begins the course by attacking others’ points of view. Over time, his learning practices are shaped by the community through interpersonal feedback, until he learns to respectfully challenge others and advance the communities’ idea on physics principles regarding balance and building. By taking a broad view, Herrenkohl and Mertl show how the individual and community are in nuanced, bidirectional interaction throughout the course of study.

In an effort to examine this interdependence more thoroughly in the context of a KBC, this research focuses on the following questions:

(Q1) *Given the ‘freedom to learn’, what topics of inquiry do students choose and how do these relate to their everyday lives and interests?*

(Q2) *In what ways does a KBC refine individuals’ ideas so they can make a contribution to its knowledge base?*

Methods

To answer these questions, we investigated a graduate course in an educational technologies program. Specifically, the course, “Challenges and Approaches to Technology-Enhanced Learning and Teaching” (CATELT) had the triple aim of, first, introducing the participants to knowledge about human learning; second, having the students experience the myriad challenges and approaches of technology-enhanced collaborative learning; and third, for students to consider and reflect on themselves as learners (Authors, 2018b). This was a unique setting in that both the process of knowledge building as well as the specific knowledge being built were intricately tied, in a form of experiential learning.

To create opportunities for students to reflect socially on their knowledge building process, a significant portion (approx. 45 minutes) of each weekly 3-hour face-to-face meeting was dedicated to person-centered activities. The general principles guiding these group reflection sessions were giving unconditional positive regard, so that people feel accepted and can ‘bring themselves in fully’ to the community, without the need of facades such as looking smart or trying to please the moderator. Likewise, students were instructed to write online reflections in a personal (but public) page that each student had online. The person-centered activities created an environment of trust, care, and empathy among participants.

The data corpus included a full 13-week semester of CATELT (2018-2019), with 18 students, an instructor (moderator), and a teacher’s assistant (co-moderator). The general interactional approach of the researcher was of minimal intervention, just enough to develop trust and rapport with the students so they will feel comfortable. Audio and video recordings of every face-to-face meeting were collected, along with online artifacts created on a course wiki and the Knowledge Forum, and open interviews at opportune times with students. We have employed a narrative approach to answer the research questions (Erstad & Sefton-Green, 2013). This involves fine-grained analysis of the situational ways that students advanced their knowledge and interests and the way the community shaped these through feedback or modelling processes. For this presentation, we focus on one illustrative case.

Findings

Part I: The Expression of Ziv’s Identity in the Learning Community

Ziv, aged 40, was a modern orthodox man who was a high school physics teacher with 10 years teaching experience and had involvement in several physics-related projects in the private sector. Ziv’s practices within the learning community were consistent with stereotypical notions of his religious culture and profession. These were expressed in two ways. First, Ziv was not inclined to talk about emotions or disclose personal information, expressing guilty feelings around having close or deep relationships with others outside his immediate family. For example, he stated that “the word intimacy for me is confined to the context of couples and can’t be borrowed to other worlds” (Online wiki conversation, week 4). This was related to his analytical disposition, focused on ideas and not people or emotions. In the first face-to-face activity, students were asked to draw themselves today and at the end of the course then explain their drawing publicly. He described the difference analytically using computer terminology: “When I look at the picture [of me today] I identify a critical bug that I didn’t pay attention to...”.

In addition to Ziv’s disinclination to talk about emotions, Ziv looked for absolute truths or answers. In one small group conversation during week six, Ziv’s group discussed what the notion ‘understanding’ means. Their conversation revolved around a figure that they had drawn on paper at the center of their table during their discussion. The drawing had circles that were each connected with lines, like a network.

Ziv: I want to define what is understanding. And to define first that for any understanding to occur this network [referring to the drawing] needs to connect something. And what will it connect if it doesn’t have anything? It needs to connect concepts, words, and ideas.

The absoluteness in Ziv’s thinking about understanding is expressed when he explicitly said that there are concepts, words, and ideas that exist outside of a person, as if they are objective, and understanding is built by connecting these absolute truths. One of the students pushed back against Ziv’s absolutism by responding that “there is no such thing [as external knowledge]. From the moment a child is born it begins to build knowledge.” Relatedly, Ziv often positioned himself as a “knower” in relation to others, in the sense that what he understood was better than his peers. In reflecting on group work, he explained that by working with a group the product was “mediocre”, where if he was the leader of a group he could bring it to excellence (week 4 GRS). He was also dominant and controlling in the way he collaborated with others. While he expressed the ideas of giving others space to work, he would often dictate the

agenda and direct others what to do. During week 2, for example, he gave another student explicit instructions during their online collaboration, even writing that “you must finish by tomorrow night”.

Ziv’s knowledge building interests

Given the freedom and choice to inquire in the learning community, the interests that Ziv expressed corresponded closely to the practices and identity that he exhibited in the learning community. Specifically, he focused on two big ideas during his collaborative knowledge building activities. These included novices and experts and the zone of proximal development (ZPD).

Ziv’s interest in these topics reflected his identity and motivation in advancing himself as an expert teacher and “knower”. For example, in the final course reflection, he wrote that learning about novices and experts “was very meaningful for me because... it helps me very much as a teacher understand learning processes that I see in the classroom and how [I can] facilitate this.” In his knowledge building efforts around this idea during week two, he focused on the highest levels of expertise and how to get there. He chose to explore the topic of “adaptive expertise”, reflecting about himself and providing a specific list of ways he could become an expert:

Ziv: The question echoed throughout my work as to how I can become an expert... (1) I have to invest a lot of time and be serious; (2) Before I write anything I must read all the material carefully; (3) I must try and formulate structures to learn before I write and discuss the details; (4) I must connect to the subject, ‘feel’ it and even love it so that I can understand it better.

Ziv’s interest in the concept of the ZPD was similarly meant to advance his own teaching practices, again positioning him as the knower who needs to provide others with answers. He chose the ZPD as the main topic in his final course project, in which he dedicated approximately six weeks of efforts into developing.

Ziv: My final course project will be a continuation of this idea [how to turn a novice to an expert] and will deal with the topic of ZPD... (Final course reflection)

Part 2: Shaping Ziv’s Identity

As the community continued to get to know one another and Ziv in particular, they were able to provide feedback on each others’ identities as learners by drawing on the potent first-hand knowledge they had accumulated about each other from their shared endeavors in the course. Following the person-centered design principles, this here-and-now feedback was given in an unthreatening way with a great deal of sensitivity.

There were many different episodes throughout the course where Ziv received this type of feedback, particularly during the middle weeks of the course (weeks 6-10). These touched on the way Ziv analyzed people instead of hearing them empathically, on being too controlling, emotionally distant, too focused on his own perspective, and that he looked for absolute answers. One particular conversation during week eight was especially consequential for Ziv. During the group reflection session, Ziv became the focus of a 30-minute group discussion that centered around his identity as a learner. The conversation began when Ziv commented that he did not have enough time to deepen his understanding of the week’s reading even though he read the article three times. The moderator shifted the conversation to focus on Ziv’s practices, raise questions about them, and explore his feelings:

Mod: You want to get full control. We [in this course] are talking about something else. Most of us read and don’t understand everything, especially something so complicated. I understand something partially and that is okay. How does it feel compared to the beginning [of the course]? There were tables and charts [that you created] for those who worked with you...

The moderator, however, recognized an incongruence between Ziv’s inner feelings and what we communicated thereafter:

Ziv: ... I think that I will focus less on the product and more on the process...

Mod: I feel that you are using an external voice that signals that you do not feel this way.

Ziv: You are right. It is an external conclusion...

Following Ziv's response, the group considered Ziv's uncommon vulnerability as an opportunity to provide him with sensitive and personalized feedback. Five different students addressed his identity in different ways. First, Julia pointed out Ziv's incongruence, suggesting that it was not just the moderator that noticed this:

Julia: What I saw is that you agree to a framework. I [referring to Ziv] understand that it is good to learn this way but I [Ziv] don't fully agree with it.

Another student then complemented Ziv for an open-minded practice that he once exhibited earlier in the course, following it with advice about how he needs to let go of his controlling behavior and try different practices:

Naomi: When we worked on our podcast you did something that you didn't fully agree with, but in the end you were happy. You were happy that you let go that it wasn't the way you wanted. I have some advice that maybe a different type of knowledge can also be with you in your body but you get to it in a different way. You are used to a certain path that brings you to good outcomes, but maybe there are other paths that look dangerous. I felt your need to know and to be in control on everything that you can be. I really appreciated the way that you describe learning, that you want to deepen. I think that you are ready, maybe to try a different way, but I don't know if you really want this adventure.

A third student then connected these practices to Ziv's other aspects of his identity as part of his everyday life:

Nurit: During one of the first reflections when we talked about changing, you told someone not to change. And maybe this is what you want for yourself? Maybe you need to release 'Ziv the physics teacher'.

A fourth student then related this to her own practices and challenges, suggesting that it was legitimate and even human to not have absolute answers and, instead, to be in a lifelong learning process:

Joana: I feel like we are the same. I am very realistic but I made a change in recent years. Because things aren't black and white. When we talk about people it isn't mathematics. There are grey areas. There is no single truth. There are contradictions...

The comments touched on a tender area for Ziv, giving him many new ideas about himself to reflect on. In the immediacy of the discussion he responded impersonally, but still in a way that suggested that he understood that his practices and identity could transform:

Ziv: We learned in a very absolutist [educational] system. Maybe change is needed.

Throughout the remainder of the semester, Ziv exhibited a number of changes along these lines, suggesting that he appropriated the feedback. For example, during the week 10 collaborative assignment students were asked to work on the Knowledge Forum to advance their collective knowledge. Ziv posted a note that expressed his uncertainty, "I still do not understand how to work with it but this is an opportunity to learn", and showed a high degree of openness about the process of work by writing, "I suggest that we work here [in a particular view] to build knowledge... what do you think?". These changes were also echoed in Ziv's final course reflection.

Ziv: One of the insights and feelings that I have was that the closeness and the personal connection between the learners that were established in our community built a steady foundation for our learning. What I said in the last sentence I could have only guessed rationally before the "hug", but once I experienced it I can say that I understood it differently from the way I understand it in the beginning.

Ziv's changing knowledge building interests

The changes that Ziv underwent related to his identity were also reflected in the changing focus of his inquiry. Specifically, Ziv's understandings on novices and experts as well as the ZPD shifted from (a) how they can help him as a teacher, to (b) concepts that had a process and social orientation.

Ziv ultimately decided to focus on the concept of ZPD together with a partner (Nurit) for his final project. Whereas in the beginning Ziv focused on the ZPD in the relationship between an expert and novice (what he referred to as asymmetrical), Ziv later took great interest in symmetrical relationships, or how peers can help one another

advance. Ziv and Nurit ended up writing an analysis of Vygotsky's translated works with an eye on how to practically design learning environments where learners are supported by their peers.

Discussion

The research questions in this study sought to elucidate (1) the topics of inquiry that students choose and the relation of these to their everyday lives, and (2) how the community shapes these ideas. The narrative account of Ziv shows that, in relation to the first question, his inquiry interests when given the freedom to be himself were deeply connected to his identity and practices in his everyday life. Specifically, Ziv showed signs of being a 'knower' with 'absolute answers', analytical instead of personable, and controlling of collaborative learning processes. These practices were tied to his everyday life—Ziv's modern orthodox religious beliefs and profession as a physics teacher. They were also tied to the knowledge that he sought to advance during the first few weeks of his life in the KBC—expertise and the ZPD. In relation to the second question, as the community got to know Ziv and recognized his practices, they were able to provide him with a wide range of customized, personal feedback that promoted his identity development. The feedback he received covered many of the salient facets of his identity and practices, which especially came through in a dramatic discussion around Ziv on week 8. There, many members of the KBC sensitively shared their thoughts about Ziv to him, providing him with a new level of self-understanding and allowing him to make intentional changes to his identity and practices. This, in turn, shaped the knowledge that Ziv sought to contribute to the collective knowledge base. While he maintained an interest in the same general topics, his view on them shifted to an orientation that emphasized a social learning process with the topic of peer learning in the context of ZPDs.

The answers to our research questions are consistent with holistic notions of learning following sociocultural traditions (Herrenkohl & Mertl, 2010). They emphasize the importance of ever-deepening interpersonal relationships, as these provide opportunities for students to see aspects of people's identities that are often hidden behind masks they put on in their cultural roles as students who are not truly "free" to be themselves. Getting to know one another deeply facilitates a deeper understanding of one another's ideas, particularly in a setting like ours where the process of learning and the knowledge were intricately tied together. Exploring issues of identity also facilitates self-understanding, and as we saw with Ziv, allowing a person to make more intentional decisions both in relation to how engage in the knowledge building process as well as what topics to pursue. Obviously, it would be of high interest to see how these issues play out in other KBC contexts, like math or science with kids, and we hope that future research will take up these questions.

Conclusion

Today's innovation society requires a broad perspective so that people can connect their everyday lives to their knowledge building efforts in a way that they can sustain and be self-directed. Our research on students' freedom in KBCs, along with the way communities shape and are shaped by these freedoms, provides a new outlook on the knowledge building process as a whole.

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