# Interconnecting Knowledge, Experience, and Self in Humanistic Knowledge Building Communities

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Abstract: This study attends the learning sciences to the work of Carl Rogers and personcentered education. Building on claims that knowledge building communities are ideacentered, as well as recent research in this area that has looked at learning holistically, we examine the notion of a 'humanistic knowledge building community' as an integration of idea-centered classroom knowledge building communities with Rogerian personcenteredness. We investigated an innovative course for graduate students in an educational technologies program that both inspired and informed this conceptualization. The results of our research led to an operational KES framework that reveals different patterns of interconnections between students' evolving knowledge, experience, and self. In this study we report on these through the lens of a single student.

## Introduction and background

The learning community approach has been one of the most significant contemporary developments in educational instruction addressing the vital need for meaningful interpersonal learning in the digital age (Adams, Becker, Freeman, Giesinger, Cummins, & Yuhnke, 2016). Over the past several decades, considerable knowledge has accumulated as to the ways that these classroom learning communities should be designed (Hod, Ben-Zvi, & Bielaczyc, 2016). Knowledge building communities, a paramount model of classroom learning communities, have been idea-centered, with a focus on having participants learn as they take responsibility over advancing their collective knowledge (Bielaczyc, Kapur, & Collins, 2013). In recent years, research has begun to look at the interplay between students' knowledge, the activities they engage in, and their identities (Herrenkohl & Mertl, 2010). With an eye on contributing to research on knowledge building communities in this direction, in this paper we draw on data from a unique classroom knowledge building community that introduces person-centered activities—rooted in the work of Carl Rogers—to its design. The purpose of this paper is manifold: First, to draw out the differences between idea- and person-centeredness based on their unique academic lineages; second, to show how their integration is without precedent even though several lines of research address different aspects of it; and third, to elucidate how their integration leads to a unique phenomenon we call a 'humanistic knowledge building community', which we subsequently instantiate in a case study of a learner.

#### Idea-centeredness

Knowledge building communities have been at the forefront of the effort to rethink education (Bielaczyc et al., 2013). While in many ways similar to other learning community models, knowledge building communities differ in their emphasis on 'knowledge work' over 'learning'. Stated differently, knowledge building communities foster learning in its participants, but as a by-product of engaging in the enterprise of progressively advancing knowledge. Idea-centeredness refers to a commitment of advancing the collective knowledge of an organization.

The implications of being idea-centered can be seen in various aspects of the classroom, such as the types of activities that are designed and the technologies used to support them. Learning communities may involve sharing and whole-group discussions so that students can learn from each other. In knowledge building communities, participants must take *collective cognitive responsibility* by being aware of others' contributions, making complementary contributions, and engaging in varied roles necessary to achieve the collective knowledge goals (Zhang, Scardamalia, Reeve, & Messina, 2009). In terms of technology, learning communities offer mechanisms for students to exchange and build on each other's ideas. In knowledge building communities, technologies such as Knowledge Forum focus students to relate their contributions to those that the community already developed. Not only do certain features point out what ideas they have read or not read, when participants post their ideas they mark the relationship of their ideas (e.g., build-on) to the growing database of knowledge.

This view of idea-centeredness does not mean that knowledge building communities are the only classroom learning communities that are exclusively idea-centered. In a review of several socioculturally minded classroom learning communities, Bielaczyc, et al. (2013) explain that "putting students' ideas at the *center* of the community work communicates to students that their ideas matter to others and that they have a position of responsibility in contributing to the community's advancement" (p. 4). Learning communities are idea-centered

in so far that the knowledge is public and advancing it is a collective responsibility of its participants. By being explicitly idea-centered and as an innovator of this approach, knowledge building communities are the paragon model of idea-centeredness.

#### Person-centeredness

Central in Carl Rogers' perspective of person-centeredness is that human life has an inherent motivation to expand and develop. So inherent was this belief that therapists and educators didn't need to inspire self-fulfillment in patients or students, but rather served the purpose of removing the obstacles that blocked personal growth (Rogers, 1969). Free from interpersonal, societal, and cultural restrictions, people could fully-function or actualize themselves in an ongoing process of self-discovery. So far reaching were the implications of these ideas, they spread into nearly every form of modern organization including the scientific establishment, which increasingly accepted post-positivistic perspectives and methodologies (Rogers, 1970).

Although individual therapy and counseling was the large focus of the early part of Rogers's career, he was deeply interested in intensive group experiences for a large part of his later career. Influenced by Gestalt Psychology and Kurt Lewin, who opened the Research Center for Group Dynamics at MIT in the 1940s, Rogers championed the encounter group (Rogers, 1970), what he considered to be "perhaps the most significant social invention of this [20<sup>th</sup>] century" (Rogers, 1968, p. 265). There have been various forms of such groups, such as sensitivity training (or T-), human relations, or personal growth groups, and they have been applied in therapeutic, personal, professional, and educational settings. These all shared the common goals of seeking personal change through generally non-directed human interactions in groups (Lieberman, Yalom, & Miles, 1973).

The mechanisms that were theorized by Rogers as leading to changing one's *self* begins with the unconditional positive regard, or prizing, toward the other (Rogers, 1969). Provided with such care and support, people are free to remove their facades and in congruence between their actual experience and their self-picture. Over time, the relationship patterns that people play a part in forming in their everyday lives appear in the life of the group, what is today known as the social microcosm (Yalom & Leszcz, 2005). While a whole range of these patterns are expressed, some of them are maladaptive and impede personal growth (Kiesler, 1996). The encounter group is tasked with exploring these impediments in the context of people's relationships, so that each participant can learn what feelings their behaviors evoke in others and what responsibility they have in changing their relations. In contrast to conversations that deal with depersonalized knowledge, this relational focus between members of an encounter group is known as the process-focus in the *here-and-now* of the group (Yalom & Leszcz, 2005). The feedback that participants get about their increasingly close relationships to others "appears to be one of the most central, intense, and change-producing aspects of group experience" (Rogers, 1970, p. 33). The changes that people make within the group are later applied to their everyday lives. In this way, the encounter group focuses on shared experiences as a way for people to learn about and intentionally transform themselves.

# Integrating idea- and person-centeredness: The KES framework

Taking idea-centeredness to be a nuanced, yet essential factor that distinguishes between a type of socioculturally minded learning communities and other learning community approaches, we can identify why adding person-centeredness to idea-centeredness is without precedent. Although learning communities are often focused on the learning of disciplinary content, this does not make them explicitly focused on advancing collective knowledge. From the perspective of knowledge building communities, it is conceivable to see the value of adding encounter groups activities to actively attend to the self and enhance the participants' learning.

When participants enter into an idea- or person-centered group or community, they focus on two of the following three dimensions: knowledge (K), experiences (E), and self (S). Idea-centeredness focuses on advancing community knowledge as participants share the experiences of working together. The participants' selves may be important, but in practice the designs only passively attend to them. In contrast, person-centeredness focuses upon self by getting participants to reflect on their experiences and who they are in the ongoing activities. While knowledge may be important, it is only a secondary concern of the design. Thus, having a design that integrates idea- and person-centeredness serves two complementary goals that are linked by the shared experiences of the members in the learning community.

The KES framework (Table 1) shows the relationship between knowledge, experience, and self, spanning the *here-and-now* of the community or from the past and outside of it (*there-and-then*). There-and-then knowledge refers to content previously known  $(K_1)$ , past or present experiences from students' everyday lives  $(E_1)$ , or descriptions of a person's self outside of the community  $(S_1)$ . Here-and-now knowledge refers to new content the students are advancing  $(K_2)$ ; current learning experiences  $(E_2)$ ; or a person's self within the community  $(S_2)$ .

	<b>Idea-centered design</b> Paragon example: KBC		Person-centered design Paragon example: Encounter groups	
	Knowledge	Experience	Self	
Then- and- there	(K <sub>1</sub> ) Things that people say explicitly, or can be implied from what they say, that reflect the conceptual framework of learning that they had before the learning community (e.g., learning as transmission, individual learning, etc.)	(E <sub>1</sub> ) Things that people say explicitly about their experiences in life before and outside the learning community or about the context itself (e.g., situations they found themselves in, a characterization of the situation/setting, etc.)	(S <sub>1</sub> ) Things that people say explicitly about themselves, or can be implied from their words or practices as being about who they are prior to the learning community and outside of the learning community.	
Here- and- now	(K <sub>2</sub> ) Things that people say explicitly, or can be implied from what they say, that reflect the changing conceptual framework related to the domain that they gained from the learning community	(E <sub>2</sub> ) Things that people say explicitly about their experience in the learning community or about the learning community itself (e.g., we had a card activity, this is what happened when we)	(S <sub>2</sub> ) Things that people say explicitly about themselves, or can be implied from their words or practices as being about who they are within the learning community	

## Methods and analysis

To elucidate the way that learning in a humanistic knowledge building community occurs, we investigated a graduate course in an educational technologies program that had been running for the past decade and whose design explicitly drew upon idea- and person-centered activities. The design was based on the lead instructor's (third author of this paper) unique background in both knowledge building communities (idea-centered) and sensitivity training groups (person-centered). Specifically, "Challenges and Approaches to Technology-Enhanced Learning and Teaching" (CATELT) had the triple aim of, first, introducing the participants to knowledge about human learning [K]; second, having the students experience the myriad challenges and approaches of technology-enhanced collaborative learning [E]; and third, for students to consider and reflect on themselves as learners [S]. To elucidate how these three goals were interconnected and mutually supportive of the other, we took an ethnographic approach that focused on two specific research questions: (1) How do students' knowledge, experiences, and self co-develop in humanistic knowledge building communities? (2) What role does the integrated person- and idea-centered design have in fostering these co-developments?

### Design of CATELT

CATELT was structured as a blended course, where weekly 210 minute face-to-face (ftf) meetings alternated with ongoing activities for the remainder of the week in a wiki environment. Activities were generally designed to promote knowledge advancement through collaborative experiences (idea-centered) or focus on people's experiences and selves (person-centered). Even though each activity had a different foci, person- and idea-centered artifacts and dialogue occurred in ftf discussions or on the wiki. The continual building-on of previous material between the different spaces as well as over time led to a fluidity of learning that had to do with knowledge, experience, and self over the different activities. Due to space limitations in this conference paper, we refer the reader to several published studies about this unique design (Hod & Ben-Zvi, 2014; 2015).

#### Data collection and analysis

Our data corpus was drawn from a full 13 week semester of CATELT, which included an entire group of 14 students, an instructor (moderator), and a teacher's assistant (TA). After following all ethical protocols, we collected audio and video recordings of every ftf meeting as well as online artifacts created on the wiki by the students. Throughout the semester, the lead researcher conducted open interviews at opportune times when something interesting occurred and he wanted to know more about it. These data provided a start for a grounded theoretical analysis (Strauss, 1987). Over time, we developed an operational framework for identifying the three types of utterances (knowledge, experience, or self) and two categories for each (there-and-then; here-and-now) (Table 1). These are indicated using brackets in the findings section below. Although we analyzed the full corpus of students using various raters, in this paper we seek to show some of the different patterns we have found within

the full context of one student's learning. The purpose of this is to be able to have an in-depth discussion about the meaning and usefulness of this framework in understanding the deep transformational changes that can occur in these types of learning environments. Therefore, we carefully analyzed and report on one particular student who showed rich examples of integrations between her knowledge, experience, and self. To ensure that the inferences were reliable, we conducted micro-analysis meetings with a team of researchers who were all familiar with the environment and we triangulated multiple sources of evidence (Schoenfeld, 2007).

# A case study of Abby

Abby, a 52-year-old wife and mother of three, entered CATELT with a strong resume of professional experience suggesting she was an intelligent, hard-working, and resourceful learner. Specifically, having earned an M.A. in Chemistry many years before, she had a successful career working as an educational software developer, a project manager at a hi-tech company, and recently as a developer of school-based digital curricular materials in chemistry. She succeeded in what she described as a stressful work environment, where she preferred "logical things, mathematical equations and objective reality" to "wordy theories"  $(S_1)$ . Moreover, Abby was "used to working individually and not as a team"  $(E_1)$ ; and she had the perception that she was expected to cover "as much content in the topic that is being studied"  $(E_1)$ . Abby saw learning very much as a depersonalized process, being measured by efficiency and quality, in what can overall be described as a product-orientation.

Abby showed reluctance from the start of the semester about the types of learning activities the community engaged in, as well as about the ideas they were discussing. In addition to her proclivity towards "formulas and logical thinking"  $(S_1)$ , Abby related this type of reflective exercise to her professional colleagues: "They have group-building days… but they are competitive games. I am sure they would really laugh if they saw this"  $(E_1)$ . Likewise, she described the general product-orientation of her work experiences.

During the first week's introductory presentation about the learning sciences, the moderator discussed traditional models of education that emphasized frontal teaching, coverage, and knowledge transmission. Abby showed her skepticism towards knowledge from the learning sciences by defending traditional school practices:

Ftf 01 GRS: I am assuming that the University is full of researchers who learned in the paradigm of transmission of knowledge. We reached very nice and large achievements. You can't completely dismiss this  $[K_1]$ .

Abby remained critical of learning community and collaborative approaches to learning over the first several weeks of the CATELT, showing how her work experiences shaped her knowledge of the current experience she was going through.

#### KES Pattern 1: Re-interpreting prior experience

During the third week, another student, Jihan, was the center of a group reflection session. The conversation focused on the challenges she faced of having to read, write, and speak in a non-native language (Hebrew) as part of the course. Abby—a native Hebrew speaker—appeared to show great empathy with Jihan's challenge, stating "It is a very important fact that we need to consider... [E<sub>2</sub>]".

Abby related this present experience to her knowledge of learning and the implications this had on herself as an educator. She related this to the ideas of 'all knowledge builds on prior knowledge', which the students had been reading and discussing from *How People Learn*, by considering the role of the teacher:

Ftf 04 GRS: Let's say a teacher works with students... here we get into the issue of previous knowledge  $[K_2]$ . They [students] bring something from home, it doesn't matter from where, they have something that sits in their head. One of our assignments [as teachers]  $[S_2]$  is to enter their head and to understand why they think that way.

Abby further related this idea to different aspects of her everyday life. For example, she introduced aspects of her work experiences that were not so product-oriented and formulaic, but focused on previous experiences that included humanistic aspects:

Ftf 04 Int Dis: When I worked in a previous job, there was a review every year. They did a personal review of each worker. This review is composed of... first of all you write about yourself. There are about ten sections [details some of them]... Once you finish writing all these things... you pass it to your manager... then you sit and discuss together... It is a process that everyone goes through  $[E_1]$ .

## KES Pattern 2: Working through dissonances

During the week six group reflection session (GRS), Abby became the focus of discussion. Consistent with Abby's product-orientation, she had been experiencing growing discomfort with the unending and expansive activities involved in the way learning was organized in CATELT. She described how these activities related to her personal experiences and self as a learner in the community:

Ftf 06 GRS: I always have the feeling that we are not going in depth into the issues... I feel a type of fluttering on all of the things  $[E_1]$ . I don't know, for me personally this is hard because I'm usually very fundamental. I like to go into something, to dive, to understand it until the end, and to feel at the end of the course that I really acquired knowledge...  $[S_1]$ . And I had this feeling after I saw everything that I needed to do, that I will simply lift up my hands and not do anything  $[E_2]$ .

The moderator continued to inquire about Abby's statement by connecting her current experiences to her experiences and self outside the learning community, using a "flowers in a field" metaphor that she had used:

*Mod*: Do you know situations like this where you are in a field and you don't have time to get to all the flowers? Does this resemble other situations in life?

*Abby:* I am trying to think. Obviously I got stuck in situations where there were many things and I had to prioritize  $[E_1]$ . But here I wanted to get to everything, and there wasn't anything where I said, 'okay here I don't have an interest and I don't want them'. Here I wanted to do all the things, but simply I couldn't do them all  $[E_2]$ . This was a disappointment with myself, but no, I know that my time is [trails off]  $(S_2)$ .

Class: [silence for 15 seconds]

Abby: Maybe also losing control  $[E_2]$ . Meaning, not losing control. I usually plan, and I do the things, and I do everything  $[E_1S_1]$ . And here I didn't get to everything  $[E_2]$ .

The 15 second silence signified that Abby was realizing something important about herself difficult to articulate. In her work life, Abby knew that she had to prioritize her activities. Yet, in her role as a learner in CATELT, she had trouble reconciling that she needed to be active in an unending learning process. Abby appeared to be at a meaningful juncture where she was understanding that learning was a process. The moderator's probing put her at a loss for words because her current experiences and the type of characteristics that it required to succeed conflicted with the way she had been describing her prior experience and self.

### KES Pattern 3: Interconnecting knowledge and self

Following the sixth ftf meeting, Abby took the lead in creating an elaborate concept map with a peer. The map attempted to show the relation of many of the key ideas from the week's reading on situated cognition, along with some other ideas from previous readings. Abby volunteered to present the concept map during the seventh ftf meeting. Abby's reflective diary following the ftf meeting continued on the theme of being product- or processoriented that she had been concerned with previously (see patterns 1-3). Specifically, she wrote enthusiastically about new knowledge about learning that she now appeared to be making sense of, as related to the concept map, her experiences in CATELT, and her prior experiences:

07 Online diary: In class I presented the concept map that I built because I wanted to get detailed feedback  $[E_2]$ . One comment that I got: The central idea is not clear. You are right. An additional comment: There is a process here  $[K_2]$ . Obviously! As someone who worked with chemistry and science, as someone who managed many projects – it is obvious that there is a process... $[E_1]$ . When I read the summary of the article where it was written 'that knowledge is the result of authentic activity that is done in a cultural context' immediately I saw across my eyes the appropriate concept map to describe the process: there is a result that is the product, and if there is a product, then there is a process and there is a start  $[K_2E_{1,2}]$ .

After pointing out the process by which she received feedback (E<sub>2</sub>), Abby mentioned there was a "process here", referring specifically to what her concept map showed (K<sub>2</sub>). The use of the exclamation point suggested that this was a large insight for her. Abby then went on to relate this to her personal experiences of

working with chemistry and science (E<sub>1</sub>). Her description of the process starting at a certain point and continuing to evolve was a further elaboration that integrated between the idea of 'learning as a process' and her personal experiences. With this integration between the knowledge of situated learning (as she understood it) and her past and current experiences, Abby continued to articulate these notions. Directly quoting the article, she described the process by which she understood its meaning ("immediately I saw across my eyes the appropriate concept map..."). Although she did not specify whether she was referring to her past or current experiences, based on the previous statements we can infer that she could have been referring to either one.

## KES Pattern 4: Holistic change

By the end of the semester, Abby had made what can be considered to be a transformational change. First, she was deeply involved in participating in the learning community, despite her initial resistances. Second, on her own volition, she attended a conference on collaboration following the conclusion of the course, a practice which she continued regularly after the semester concluded. Finally, following the course, Abby went on to complete her Master's thesis, and thereafter enrolled in the Educational Technologies PhD program, examining related learning phenomena as part of her research.

In a post course interview eight weeks after the course concluded, Abby was asked if she changed during the course, and if so, to elaborate on how. Her response showed an integration of her knowledge, experience, and self, spanning both the past and present:

*Int-01*....when I come [to this course], I talk, and I say what I feel, and I say what is on my heart, and this is the thing that is new for me  $[E_2S_2]$ .

*Int-02*. Usually I come to a place of work, and I need to work [pounding fist of table], and nobody really cares what I really feel... What they want from me is usually a product. The process is less important, exactly the opposite from here  $[E_{1,2}]$ 

*Int-03*. I now agree that knowledge is built collaboratively  $[K_2]$ . I agree that what is important is the process and not the product itself  $[K_{1,2}]$ . I agree that you need to strengthen everyone. That you need to pay attention to everyone  $[K_2S_2]$ 

Int-04. To talk about myself, okay, to talk about feelings, to talk about thoughts, to talk about how I learn, how I work, all the metacognition, all of this analysis  $[E_2]$  – these are things that I didn't have, this is one thing  $[S_{1,2}]$ . The second thing that really [emphasis] changed for me is to understand the contribution of the community in the shared learning  $[K_2]$ . I didn't think this was important at all  $[K_1]$ . And today I am found with a feeling that there is a lot to it  $[K_{1,2}]$ .

In Int-01, Abby discussed her experiences in the community in relation to herself as a learner. She then connected this to her experiences outside the course (Int-02), drawing a comparison between her work experiences and CATELT. In Int-03, Abby connected this to the ideas studied during the semester, such as knowledge and collaboration. Inserting her own beliefs ("I agree with") and values ("you need to…") showed that these were not just abstract concepts, but had relevance to the way these ideas applied to herself. Finally, she integrated this knowledge and experience with her self when discussing her transformation (Int-04: "things that I didn't have" / "thing that really changed in me" / "today I am found with a feeling"), by describing her current self as a learner using new ideas about learning (e.g., metacognition, community, shared learning).

## **Discussion and conclusion**

Our main goal in this article was to explore how knowledge, experience, and self can co-develop in humanistic knowledge building communities. Sociocultural theory sees the person and activity as irreducible, such that ideas are always situated and must be viewed holistically (Herrenkohl & Mertl, 2010; Lave & Wenger, 1991). This study moves the conversation forward by showing how idea- and person-centered designs, each linked to a different academic heritage, gives attention to different aspects of this holistic learning, and how these span the there-and-then with the here-and-now. Our assumption is that integrating these two centers within one design can foster a unique type of learning, not exactly like idea-centered learning communities, but also different from person-centered groups. The findings in this study provide different insights into the unique ways this happens.

KES Pattern 1 shows the subtle way that the new experiences and knowledge gained from participating in a community can be applied back into a person's life, leading them to re-interpret past events. In Abby's case, after she had new experiences in the learning community she began to bring up past relevant material from her life that she had hitherto left out. The knowledge which Abby gained provided a new cognitive framework that

allowed Abby to reconsider her past experiences and self. Her ability to do this appeared to be a breakthrough for her, now being able to 'fit in' her new knowledge in a way that was consistent with her previous experiences.

KES Pattern 2 shows how knowledge, experience, and self are constantly negotiated between the there-and-then and here-and-now, and how dissonances between these can lead to significant insights. In Abby's case, moderated reflection led her to reconsider lifelong practices that brought a usually articulate person to silent rumination. For Abby, this moment was critical in her transformation. The 15 seconds of silence and her incoherent remarks afterwards had reached a point where they were publicly inconsistent with each other, brought to light by the moderator's questioning. Although it took six weeks of sustained reflection to get to this point, findings and 1 and 2 show how the seeds grew to a point where she had to make many interconnections between her knowledge, experience, and self in a way that bridged the past and present.

KES Pattern 3 shows the delicate and subtle nature of knowledge, and how deeply contextualized it is not just within a person's prior knowledge, but with their experiences and self. Over the course of a semester, Abby learned to understand ideas like 'learning as a process' or 'collaborative learning' in new ways. Taking a purely cognitive perspective could easily lead to thinking that Abby learned little—just a few concepts—over 13 weeks. It could lead to criticism of Abby that her interpretation of situated cognition largely missed the point. By understanding how Abby's new knowledge was tied to her experiences and self, the insight that Abby made could be valued for how truly transformative it was. It is possible to appreciate how a person can miss the canonical points about a topic (in this case situated cognition, which is much more than 'learning is a process'), yet what she did take from the topic was still highly important and significant within her own private logic.

Finally, KES Pattern 4 showed how Abby's transformation within the humanistic knowledge building community was deeply related to her co-developments in knowledge, experience, and self. Throughout the semester, she was given the opportunity to fully participate by sharing her knowledge, experience, and self with others in the community, learning by comparing what others brought to her own experience, and reflecting on deep questions about herself. While the course was only 13 weeks, it ultimately helped Abby make a transformation such that she changed lifelong learning practices despite her strong, initial reluctance.

By considering these patterns together, we are able to see the importance of both the idea- and personcentered aspects of the design, and the way they support one another. Had CATELT not allowed students to discuss their knowledge, experiences, and self in an ongoing, intensive, and deliberate way throughout the semester, it is likely that Abby would not have made such a holistic transformation. Indeed, we argue that because of the integration of the two centers, she had opportunities to sort out these complex ideas as they were relevant to her life. For example, the climate fostered through person-centeredness (care, prizing, and empathic understanding) allowed Abby to draw out her prior knowledge, experiences, and self that later shaped her knowledge about learning. Or, the new knowledge that Abby gained about learning contributed ultimately to her belief that the process, and not just the product, is important in learning. The mutuality of the findings suggests a view of learning that is much less linear, and much more like pieces of a puzzle fitting together. Even in this analysis, the borders that we draw between the findings are somewhat arbitrary: They do represent significant episodes of learning within CATELT, but they are accumulative and touch on the broader narrative of Abby's life holistically. To sum, our analysis of Abby suggests that knowledge, experience, and self are all interrelated between the there-and-then and here-and-now. When provided with sufficient opportunities and support to explore these, as humanistic knowledge building communities aim to do, the related domains of knowledge, experience, and self can co-develop and ultimately lead to transformational change.

#### Implications for theory and practice

The key practical implications of this research in both K-12 and higher education run in two directions. For knowledge building communities, it is in the prominence given to encounter group types of activities within the course design. Even in learning communities that have person-centered activities, ours is a highly unusual approach in terms of the amount of time allocated for these activities. The purpose of giving so much time for the person-centeredness is based on our serious belief in the educational principles of Carl Rogers, where the person is accepted unconditionally and is given a fertile space to grow through their exploration of self through the other. In our unique design, person-centeredness is not just something that occurs towards the start of the semester, or at the end of a course meeting when there is time left to reflect on thinking. Person-centeredness is given prominence throughout the semester, with activities designed to both maintain and continue deepening students' relationships and trust. It is in this person-centered way that we view the learning community, and why we feel it is necessary and appropriate to distinguish it from other knowledge building communities with this label.

Conversely, this research can contribute to person-centered approaches by showing the importance of idea-centered designs. One of the large and perennial criticisms of person-centeredness, akin to discovery learning or student-centered learning, is the lack of content or knowledge goals. Students in person-centered designs may

learn what interests them, but they may lack a true appreciation for what it means to fully engage in a disciplinary practice. By bringing in idea-centered approaches, students have the opportunity to explore what doing knowledge building in a particular discipline means. Within this context, they are then able to consider their prior experiences and selves and make decisions about whether these new experiences are those they value.

While designing and implementing a humanistic knowledge building community is a highly attainable goal, this comes with risks and the need for highly skilled, professional moderation. Making time for person-centeredness means allowing for unanticipated issues that the students raise, such as resistances towards the moderator, dealing with interpersonal conflicts, and other issues long described in psychological literature (e.g., Bion, 1959). It is completely understandable why teachers prefer to put aside these social and emotional matters, or deal with them individually and not as a group level process which they nurture. Moderating encounter groups often requires licensing, and the risks of running these groups can potentially disrupt students' lives if not treated with the professional sensitivities necessary. In general, we think there are ethical consideration that must be taken into account for anyone leading such a community. With that said, we do believe that fostering transformational change requires learning environments that are sensitive to the student as a whole.

Considering idea- and person-centeredness as two foci with different goals and activities helps shows the relation between what may appear to be otherwise fragmented lines of research. We have been engaged in a long-term design experiment, and although we have published different aspects of it, this is our first offering of an overarching framework to explain a great deal of our efforts. Our research has now matured to the point where we want to share our own conceptualization and findings with the broader educational community. Mainly, we seek to show how the integration of idea- and person-centeredness—embodied in what we call 'humanistic knowledge building communities'—can inform the theory and practice of learning communities. We believe that the impact of this research has the potential to start a conversation between two academic communities, defined by idea- and person-centeredness, that have yet to converge.

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