QUASI-COMMUNITIES: RETHINKING LEARNING IN FORMAL ADULT AND VOCATIONAL EDUCATION

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Quasi-Communities: Rethinking Learning in Formal Adult and Vocational Education

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Abstract

Situated learning theories such as communities of practice provide a rich conceptual framework for analyzing the processes by which newcomers become full participants in the communities they enter. However, some research shows that these concepts have shortcomings for theorizing learning in formal educational settings especially when it comes to adult academic and career preparation. To redress these problems, we propose the conceptual framework of *quasi-communities*, which retains some of the dimensions of the original concept while abandoning others. We use a case study of the continuing training of mariners as evidence to show how this framework is developed to identify and eventually improve learning in formal adult and vocational education. Our analysis illustrates the variable learning opportunities in these settings that are available or might be developed within this framework.

Keywords: *Adult education; Quasi-community; Vocational education; Maritime education and training; Career and technical education; Communities of practice*

The work presented in this article is part of a broader ethnographic research project in which we followed practicing mariners who returned to college for updating their training to extend their career trajectories. Previous studies revealed tensions between the competencies that these adults develop and are required for their jobs, on the one hand, and the competencies needed for successfully completing college training courses, on the other hand (Emad & Roth, 2008, 2009). In this study, we propose a conceptual framework that allows us to better understand the interactions in the complex social environment of the classroom of adult learners. We adopt a socio-cultural perspective on learning, a perspective that tends to be overlooked in adult learning literature (e.g. Alfred, 2002; Niewolny & Wilson, 2009; Stein, 1998). However, important theoretical concepts of this perspective such as *community of practice* have been subjected to recent criticism (e.g. Engeström, 2007; Roth & Lee, 2006). Since the concept of community is still an evolving concept (Engeström, 2001; Li et al., 2009), we propose below, moving from the concept of community to that of *quasi-community*. This notion here is used to denote an occasioned, temporally limited community within an educational context that lacks the essentially spatiotemporal nature of relations within true communities.

FROM COMMUNITIES TO QUASI-COMMUNITIES

Communities

In socio-cultural learning theories, the community of practice and frameworks rooted in the community of practice such as community of learners (Brown & Campione, 1990; Rogoff, 1994) and *community of interest* (Fischer, 2001) have changed the perspectives on learning from the individual to the collective. Based on these theories, learning is defined in terms of the changing participation in some form of collectively motivated activity that is the result of a

history in a particular culture/society (e.g., Lave, 1991; Rogoff, 1990). The notion of a *community* in the community of practice emphasizes the role of collective activity in bonding the individuals to their communal society and shows how the collective shapes, forms, and legitimizes the actions of individuals (Lave & Wenger, 1991). Indeed, any individual acts in a way such that others recognize in it their own ways of acting; it is in this *acting for others* that practices are shared (Roth & Jornet, 2017).

One of the contexts where the notion community of practice has been used is teacher development, with its own common motives, discourses, and practices. In one instance, teachers' professional development was studied in an online education community of practice (Schlager et. al., 1998). In this work, the Internet was treated as a socio-technical landscape containing many gathering places for individuals and the group. The study examines how an online community of education professionals support and enhance their growth over the length of their career. They claim that they incorporate their idea in developing a product that helps providing opportunities and mechanism for teachers to develop and sustain a virtual community that supports their effective professional growth. In later work, these researchers investigate whether the online teacher education communities indeed constitute true communities of practice (Schlager & Fusco, 2003). They report that to cultivate and sustain, the online community should be situated within local face-to-face teacher professional development communities, such as those that develop within local school districts.

In recent years, the community of practice has become one of the most influential concepts that have emerged within the social sciences (Hughes, Jewson, & Unwin, 2007). However, this concept was originally developed through research on learning in its natural settings such as apprenticeship training in workplaces (e.g., Merriam, Courtenay, &

Baumgartner, 2003). Although further studies showed applicability and appropriateness of this concept for informal learning, its ability to conceptualize and identify learning and knowing in formal education remains one of its major shortcomings (Barab, Kling, & Gray, 2004; Boylan, 2010; Hagedorn & Springgay, 2013; McArdle & Ackland, 2007). Indeed Lave and Wenger (1991) suggest that work in schools is not at all the same as work in communities of practice. Instead, there are some lessons about learning and identity that can be learned from community of practice and then applied to schools.

Limitations of the Community Concept

There are major differences between formal and informal learning that prevent the use of the concept of community in its original form in both formal and informal domains. These differences arise from the fact that in formal schooling, the collective is a group of individuals (Roth & Jornet, 2017). For example, school classes or university courses do not carry the same form of collective memory that characterizes communities of practice. That is, the very history that characterizes continuously evolving communities of practice is absent from classes and courses: their existence is the result of administrative reasons and they are disbanded after a short period of time (semester, quarter, school year). Moreover, in true communities individual learning changes collective practices whereas in classrooms individual actions generally have no effect on the common practices of the collective (e.g., Roth, Lee, & Boyer, 2008). Thus, the concept of community of practice cannot capture the learning processes in formal learning environments. Although the conventional praxis of schooling does not historically promote the

classroom to be an authentic community, the research presented here shows that the concept may be suitable in a modified form to theorize learning in some adult classrooms.

Most of the drawbacks originated from the fact that the concept of community comes from the dialectic (i.e. mutually constitutive) relation between the individual and the collective. As the founding father of the socio-cultural tradition complained, investigators tend to approach the collective as a group of individuals and thereby fail to capture the essence of the dialectic (Vygotsky, 1997). To this day, this dialectic has been falsely integrated into a dualist epistemology that reduces knowing and learning to either the individual or the collective pole (Roth & Lee, 2007). Further endeavours to expand the theory tended towards the application of the concept for informal learning in businesses and industries (e.g., Wenger, McDermott, & Snyder, 2002). As the relevancy of the idea was confirmed, its use expanded into other fields. One example is the idea of *communities of interest* (COI) (Fischer, 2001; Fischer & Ostwald, 2005). COI tries to address the challenges of involvement of stakeholders form different practices and backgrounds in a collaborative project. This theory benefits from identifying different stakeholders as communities of practice. This gives them the ability to address managing practices by promoting constructive interaction between multiple knowledge systems. The division of labour in these communities of practice lends better itself to understand their social dynamics and paves the path for effective management of their interactive activities for production of a common design/artifact.

Some of the attempts to further expand this theory into formal educational settings—e.g. *community of learner* (Brown & Campione, 1990; Rogoff, 1994; Roth. 1998)—were partially successful for young and school-age children. However, the implication of this concept in adult and vocational formal educational settings remained problematic. Most attempts to use the

concept of communities of practice for adult and or vocational education at school formal setting environment treat the classrooms as communities that are concerned with learning *about* practice in contrast to the workplace communities of practice with the purpose of delivering a service (e.g. Pearson, Scott, & Sugden, 2011). Scholars therefore suggest that the formal learning context of school classrooms cannot be true communities of practices, though in their analyses, they treat them as such. Such attempts seem to under-theorize the concept, as there is a lack of differentiation between community of practice and the community of learning (or as they sometimes named it community of practice of learners) and the activity system; the terms are then used interchangeably (McArdle & Ackland, 2007).

QUASI-COMMUNITIES

From a socio-cultural perspective, a *community of practice* is the proper unit of analysis (Lave & Wenger, 1991). Indeed, in this perspective, any higher psychological function *was* a social relation first and personality is the ensemble of social relations with others (Vygotsky, 1989). Although members of a classroom do not fully constitute a community of practice (Roth, 2008), the idea of learning through participation in a shared enterprise might be useful in thinking of *quasi-communities*, when the unit of analysis also includes the activity of the vocational domain from which the practitioners come to attend college courses. In this study, we use the term quasi-community to allow differentiation between the original concept and the type of social relations that we observed when mariners returned to the classroom in a formal educational setting to upgrade their training. The main contrast is in the hierarchy and distribution of expertise in the community. In the original concept of community, the

participation of apprentices is theorized to be peripheral to communal practices and the behaviour of the masters are defining the central, core practices. Here learning is conceived as a trajectory of legitimate peripheral participation that changes with competency until participation resembles that of core practitioners. This process also constitutes the renewal of the community where newcomers constantly join, thereby introducing variations into the practice, and gradually replace the old-timers and old practices.

In the quasi-community we present, mastery does not have a temporal nature as it is observed in true communities. Here, the concept of competence and providing expertise has a dynamic nature and is not one-sided as from master to novice—old-timer to newcomer. There is no noticeable core and periphery in this community. In other words, the quasi-community lacks the spatiotemporal nature of membership in true communities, such as, for example, on the bridge of a naval vessel (Hutchins, 1995). The hierarchy in the quasi-community is not structured but is dynamic and distributed across the community members. In a quasi-community, mastery is defined relative and in terms of the relation between individuals and the occasioned, temporally limited community they form while attending formally organized training. In our study, masters (old-timers) are those who have more experience with the task at hand and can contribute in the ongoing problem-solving process. A “master” is someone whom others consider to be a major resource for achieving the objectives of the task at hand. Any member of a class or course may exhibit mastery when entering his/her expertise into the community and contributing to the learning of others. As a college course unfolds, therefore, individuals dynamically function as old-timers (masters) or newcomers (novices) as they learn from or contribute to the learning of others.

METHOD

The present investigation is based on an ethnographic study in a Canadian maritime vocational institute. It consists of video recordings of students' tasks in-and-out of classroom, interviews, and field notes from a series of courses offered for mariners applying for their certificate of competency. This study focuses on one of the courses delivered by the institute for the candidates of a maritime watch-keeping certificate of competency. (Watch-keeping means participating in the safe operation of a vessel, which may be in any one of several functions, such as looking out, monitoring engines, and navigating.) Fifteen mariners participated in the course: 12 males and three females with varied ages. All except one were from the same geographical region. The course lasted eight weeks, which included 120 hours of classroom activities and three field trips. All participants had prior practical experience onboard ships. They had worked as crewmembers for a period of time and, in the attempt to advance their rank to navigating officers, were seeking to obtain the required certificates. Their past experiences were varied as they came from different parts of the marine industry including fishing, passenger ferries, tugboats, and coastguard ships. The instructor also was a professional mariner and used to work as a certified navigating officer and as a captain.

We visited the school every weekday and attended the courses and field trips to observe students and instructors. The class sessions were videotaped, as well as all other interactions and moments that appeared important or of interest. Field notes were made during the observations directly into the computer. While onsite, we conducted formal and informal interviews with the students and, occasionally, with the instructor and course leader. All video recorded interviews were transcribed verbatim. (All proper names are pseudonyms.)

The course featured in this article for exemplifying purposes was part of a package offered by the maritime training institute based on national criteria governing the certificate of competency. The title of the course was "Chart-work and Pilotage." The aim of the course as stated in the curriculum is for the participants to develop skills and competencies to plan and conduct a passage and determine position. The examination at the end of the course, conducted by the certification authorities, consisted of two parts: (a) a multiple-choice and long-answer test and (b) a chart-work examination (a written examination, which included drawings and use of specific tools on a marine chart).

PRAXIS AND QUASI-COMMUNITY DEVELOPMENT

This study was designed to contribute to the literature by proposing the concept of quasi-community. In this section we present exemplify materials from an ethnographic endeavor into the training of mariners, who attended college to obtain a watch-keeping certificate. We show how a group of adult practitioners developed the competencies they needed. We feature the quasi-community pedagogy and analyze the key elements of the praxis that allowed the course participants to develop and succeed. We show how the praxis provided opportunities for them to become conscious about their common objectives, which in turn mediated their collective motive for their community creation. We then discuss how the pedagogy, which was co-produced by the instructor and students, utilized the tools and communicative resources to shape the quasi-community, mediate its progress, and allow the course participants to become competent problem-solvers in their domain.

Collective Motives and Community Development

At the heart of the community development is the shared understanding, common interest, and collective motive(s) of its members (Lave & Wenger, 1991). A key element for the formation of a quasi-community is the common *object/motive*, the ultimate product of the work as (changingly) perceived from within the work process (Roth, in press). It provides a reason for its members to come together as students are internally motivated to form a collective when they feel that their interest is shared by others (Lompscher, 2006). It is crucial for the pedagogy to provide possibilities for the students to realize their common object/motive early in their program. Analogously, at the start of the course the instructor asked the course participants to introduce themselves to the class and to give a description of their professional background and their purpose for attending the course. As he told us, it is one technique that he uses to reduce anonymity and to promote classroom members to know and communicate with each other. Almost all of the participants noted that apart from the developing competency in working with marine charts their main intention is to get ready to pass the certification examination. Obtaining the certification of competency is a requirement for promotion or change of direction in their career. As one participant indicated, "my goal is to get that certificate and by achieving that certificate I hope that I'd be a Second Mate." Another participant mused:

> The reason that I attended the course is so I can possibly take over the boat… run it, in the future . . . step up. Umm, tired of being deckhand . . . I wouldn't be ready for the [certification] exam if I was to challenge it so I had to come and learn more of chart-work.

The praxis allowed participants from early on in the course to become conscious of their shared object/motive, namely obtaining competency in working with marine charts and passing the certification exam. There was a sense that the individual could increase agency and control over learning by contributing to the collective agency and control; there was therefore a sense that contributing to increasing the learning opportunities of others enhanced individual learning opportunities. The result is a type of constitutive relation where individual success and collective success come to be bound together—as this is the case in true communities. Such a shared purpose has the potential to bond members and provoke their community development (Hildreth & Kimble, 2004). Analogously, the pedagogy and instructor's practices played a significant role in facilitating the students' realization of their mutual interest, which in turn promotes development of their quasi-community. The instructor became aware of the course participants' mutual object/motives (i.e. success in certification examination and gaining competency related to chart use) and aligned the pedagogy with and incorporated them into the classroom practice. This invited students' attention toward participation and sensing meaning and authenticity in the classroom activities.

To promote the students' collaboration and engagement in their community, the instructor designed a series of group activities. Students were free to choose their group members. During the early stages of the course, most of the interactions occurred in small groups consisting of students with shared commonalities and interests. These groups mainly consisted of those who were from the same sector of the industry and or even worked for the same company. They communicated, collaborated, and participated in the conversations and activities in their small groups. The realization of common object/motives across groups provoked the cross

communication with other groups, and soon the interactions became widespread and all class members engaged in each other's discussions and activities. Through the practice, the knowledgeability shared or produced by students in each group became available to every individual member of the classroom. The contribution of all of the course participants made these discussions more rich and relevant to the interests and objectives of the class (community) as a whole. This was demonstrated itself in the progressive coordination in students' collaboration and engagement in ongoing classroom activities. The instructor's role in coordination of activities, in fact, played an essential part in establishing mutual interest or common ground as a necessary element for engagement and collaboration of community members (Gibbs & Mueller, 1990). In the course of time, the face-to-face encounters between individuals promoted shaping their community, its rule of conducts, social behaviors, rhetoric, and their culture. One of the cultural tools we analyzed that facilitated the richest communication in this classroom community was story telling.

Story Telling as a Source of Communication and Knowledge Production

In communities of practice, stories tend to be the most important means by which knowledge gets to be shared (Orr, 1990; Roth & Bowen, 2001). This turns out to be the case in the present study, so story telling also is an integral feature of *quasi-communities*. A large portion of knowledge and competencies shared by the course participants was not explicit or in the form of abstract knowledge but mostly their articulated personal experiences in the form of stories. Here the use of story as a term does not meant to be used in its general form, which is to convey narration designed to interest or amuse. We use the term story as a general concept to

differentiate between providing instruction and contextualization of the personal experiences. These narratives of representation of experiences were expression of knowledge and skills in the contexts where they were developed. These accounts uncover, surface and spotlight member's relevant competency of the subject (under scrutiny) as it developed through work experience onboard ships over time. For example, in one instance where the instructor expressed a series of angles to be memorized by the students for solving one type of trigonometry problems, some of the students expressed some concerns:

Mark: Do we have to know all of these?

Instructor: Yes, uh um, I think they are all in your manual.

Kate: Do we need to memorize these special angles or is it just something that we should sort out?

Kim: It's pretty easy angles to remember. It's three, four, five at twenty-six, twenty-five and the other ones are one, one.

Instructor: Yea.

Kim: If you like twenty-six, twenty-five angle one, that's the one that we [marine] carpenters use all the time to square the stuff up. So when it says beam distance that would be a three, distance run would be a four, that's the bottom line would be a four and the hypotenuse is five…so you can do that to measure up three feet one direction, four feet the another and the points joints at the five.

Kate: Yea, it's a nice way of remembering that.

Kim: That's a three, four, five triangle and then the ninety degrees triangle one, there is just the one-one. Right? And the hypotenuse is there.

Instructor: So…and what's the slope of the roof.

Kim: Five, twelve.

Kate: Interesting.

These narratives are cultural tools that contextualize the knowledge through the prior experiences of the participants (e.g. carpentry onboard ships). The stories' contents were related to the classroom community's concerns and the problem at hand. These stories increased students' understanding of the problem as they could relate the problems to their work contexts. These narratives engage course participants in collaborative discourse, which form, maintain, and reproduce a shared repertoire (Brown & Duguid, 1991). The shared repertoires are imperative for development and dissemination of the communities' knowledge and problem solving ability (Wenger, 1998). The knowledge conveyed in the form of stories was better understood as the stories expressed knowledge as it is developed in the context of practice. For example, in a problem solving session, a course participant asked the instructor if onboard a ship, the process did not go the way it is expressed in the exercise what they should do. In response, the instructor initiated a conversation by articulating the idea and encouraged the others, who had experience relevant to this case, to bring about their competencies and share them with the rest of the course participants. The original exercise was designed for a local waterway area well known to the participants. This allowed the students to be able to relate to the context and those who had similar experience to afford sharing their competencies.

Instructor: Umm…turn toward the tide to take another direction and hopefully, you know, it'll change because …you can imagine you're dragging something along, you know one or one point five knots, what's gonna happen. No matter what's gonna happen you are over here (pointing to the drawing on the board)…so…

Murray: Once you drop the anchor its all gonna change.

Instructor: That gotta be quite an anchor.

James: Yea, the anchor wouldn't hold along.

Murray: Yes it would probably.

James: No probably get your anchor off.

Instructor: Yea but it's a good way to lose your anchor when you are in a hurry…so try to find a beach to lean on…ya, if not you are lost, well…

Here the instructor provided opportunities to the participants to elaborate on their expertise for the rest of the class but at the same time he acted as a manager and guided the students' conversation. For example, James had previous experience with anchoring in the area for which the problem was designed and as a result, his experience was more relevant and applicable to this context. By supporting James's suggestion, the instructor legitimatized James's expertise and his related competencies. At this moment, there were small talks and discussions among the course participants. Most of the students were paying attention by orienting toward James, and after some moments:

Kate: (*asking James*) What do you do to just lay her? Lay the toe on the beach and then stay on the tide or something?

James: Yea, (*instructor nods as a sign of confirmation*) find a beach that is straight up, like, as possible (Instructor: yea) on low tide so it doesn't get caught on the rocks.

Kate: Okay

James: Just throw a beach line to the biggest tree you can find.

Murray: (*toward James*) Then you tie off the toe and wait for the tide?

James: Yes.

Mike: Tie off the toe?

James: Uh um, ya, it's better to use the ones on the outside.

This conversation continued for a length of time. James's expertise is manifest in this enriched conversation, which in turn afforded competency development and community promotion. This issue was stated by the interest of one of the students, promoted by the instructor, and developed by a quasi-community member who is an expert in the topic at hand (James). As the discussion was related to the topic of interest of students, most of them as community members participated and engaged in the discussion and competency development process. During this discussion James, as the expert on the problem at hand, became the center of attention and took the role of instructor. The praxis allowed the community members to be aware of the expertise of one of its members, in that specific field. The conversation developed a cumulative knowledge for the community and a memory that members could draw upon for

solving their similar problems. Our observations showed that the course participants returned to James on different occasions when they needed related expertise and competency.

In the above example, the instructor designed an exercise in the context relevant to the course participants' experiences. He then provoked students' participation, discussion, and utilizing the participants' expertise in solving the problem. As students engaged in the process, the instructor's role was to facilitate and coordinate the collaborative activity. He played his role as an expert by guiding the discussion and supporting the appropriate contribution of members. The instructor provided an open space for the students to share their knowledge and by doing so allowed the community to be aware of its members' competencies.

Narration in the form of sharing expertise played a key role in facilitating communication among the members. The relatedness and quality of the stories to some extent bestow storyteller status and hierarchy in the community (Orr, 1990). In the above fragment, James, who had worked in the tugboat industry had many opportunities to travel through that passage used in the exercise. Additionally, because of the nature of his industry, he had varied experiences in handling emergencies of the sort that the students were discussing. Expressing his experiences that are rare in other sectors of the marine industry made him a master, expert, and valuable resource for developing this specific type of competency.

During the course of our observation in the class, the story telling gained legitimacy and became part of the community rituals. We observed that these narrations eased the communication, motivated the course participants, and played an important role in facilitating their participation. In many instances, the stories afforded the students to cultivate authentic and relevant knowledge, which could have been very difficult to develop by mere participation in the

course. The story telling gradually became legitimized and amalgamated to the pedagogy as the instructor also shared his experiences in the form of anecdotes and stories.

In the quasi-community we observed, the stories were not generally iterations of an occurrence, which happened earlier in the community. The function of these narrations was not the verbal reproduction of the knowledge that had been developed by the old-timers in the community in order to be transferred to the novices and newcomers. In fact, they were a form of participation in the activity and thus a source of membership legitimacy. This sharing of expertise was the contribution of the members of a newly developed community to its growth. In this quasi-community, these narrations allowed for legitimacy but not so much the production of a hierarchy. The quasi-community did not function based on conventional hierarchical relations at least on a permanent base. The hierarchy, if any, was temporally limited and task oriented rather than structurally stable. As it is observable in the above example, the hierarchy in the quasi-community was dynamic and shaped by its members as they act and interact in everyday practice of their classroom community. The dynamic structure of the quasi-community allows for participation of the entire members with their varied levels of expertise.

Tests as a Mediating Practice for Community Development

A community constitutes itself through the activities in which its practitioners participate (Lave, 1991). In the quasi-community, the course activities mediate its members' collective motive. The pedagogy should allow for tasks that encourage course participants to invest in the collaborative practices that allow them to develop competencies related to their objectives. Appropriately—as in the course presented here the success in the certification examination was

the main collective object/motive— as the course progressed, working on the tests similar to the certification examination became the central activity of the course and one of the most important components of the pedagogy. The tests in the course were not intended to grade and rank the students but as the major collective object/motive tends to facilitate participants' competency development for success in the certification examination. The participants were developing this competency through participation in the practice (i.e. attending similar exams). At the same time, these tests were instrumental for the instructor and for the students to assess their progress toward the targeted competency. The results of the tests had no effect in the final evaluation of the students, which was going to be performed by certification authorities. Our research shows that the course participants judged the testing practice as a legitimate part of their learning processes as it was supporting them to reach their objective. This is in sharp contrast to common school practices where examinations provide a tool for ranking students and a means for reproducing hierarchy (e.g. Foucault, 1979). The testing practice in the course redefined the conventional power structure in schools. Here the instructor shared his hierarchical and historical power in the classroom with the students. This empowered the learners and gave them a sense of ownership of the activity. For the participants, this change in the power structure transformed the role of the instructor from a single authority to a facilitator and a valuable source of knowledge and expertise. The class was able to utilize the test results as a valid indication of the progress toward their objective—i.e. competency in success in these types of tests.

Students' contribution to the pedagogy

The pedagogy in a quasi-community is the co-production of the community members. The members' common objectives and needs have to be casted into the community's activities.

Consistently, in this study the instructor's practice and the way the course participants engaged in and directed the activities to serve their objectives allowed them to collectively co-produce the pedagogy. For example after each test, the class reviewed all of the questions in the test. The instructor read the questions one at a time and for each question asked one of the students to provide an answer. He then encouraged the remainder of the class to contribute by discussing and evaluating that answer. The process gave each member of the class a chance to participate in the practice and show their related competency and then allowed the rest of the community to evaluate and thus contribute.

Our observations yielded an interesting phenomenon in that the course participants were not only interested in knowing the correct answers to the questions but also concerned with the type of answers the certification examiners expected. The following is a fragment from an exam review session during the third week of the course. After the class discussed one of the questions and agreed on the answer and before going to the next question, one of the course participants asked:

Len:	So, what would a run like that worth on the (certification) examination?
Instructor:	Like he just wear off? I think it's four on that one.
Len:	Is that four?
Instructor:	Yea, but it's a four if the other two are complete.
Mack:	So what do you need to get four marks? I mean you need to list every…
Instructor:	Arc of visibility, umm and you need to know the ranges…
Mack:	You need to know the ranges?
Instructor:	Uh um (yes).

Katy: So if we put arc of visibility and where it is, we get two (marks)?

This fragment is an example to show that the class community had consent of orienting the activity toward their common objective. They participated in shaping the pedagogy not only by making testing a legitimate part of the practice but also by fine-tuning the process to meet their objectives. Here, the community members collaboratively produce the pedagogy that allowed them to develop competency and understanding the marking criteria of the certification authorities. At the same time, the praxis allowed the students to draw on the instructor as an expert and resource for leading them to develop the type of competency they need to pass those tests. The development of the pedagogy in the quasi-community is a dynamic process and continues throughout the course. Its progressive development is situated in the evolving context of the course. The emerging co-produced pedagogy in this course promoted students' participation and facilitated the co-development of their quasi-community.

Additionally, the exam reviewing activity allowed the course participants to contribute to the teaching practices of their classroom. The instructor required each student to provide an answer to a question and then the rest of the class discuss and evaluate the answer. This process asked the course participants to get engaged and actively contribute to the teaching/learning activity, by acting as a resource in providing the answer or by asking inspiring and productive questions. In this quasi-community, the participation and learning were one and the same, and knowing was progressively developed by legitimate participation in the activity. The praxis allowed the assessment process to go beyond the mere evaluation and evolve to a learning process.

Sense of belonging to the community

Although the learning needs alone might be strong enough to attract students to the activities, it may not be enough to retain them. It is the social interaction and sense of being part of a community that keep them motivated in their participation (Ashar & Skenes, 1993). As the course progressed, the participants' progressive collaboration resulted in development of a sense of belonging to their community. There were many instances that the course participants admitted to the fact. For example, at the end of a test reviewing session, where students collaboratively participate in answering a series of questions, the instructor marked their answers when the following conversation began:

Instructor:	One hundred percent. Congratulations (*then all the students clapped and cheered*)
Tim:	We're all courageous; no one was going to do it alone.
Students:	(*collectively*) yea (*laughing*).
Instructor:	Your collective consciousness is one hundred percent.
Mack:	Yes. We are a team.
Students:	(*collectively*) Yea, yea.

Here is an example where the students represented themselves as members of a community that encompasses all of them. The pedagogy facilitated collaborative works of students and afforded a sense of belonging. The students' sense of belonging was necessary for them to value, be motivated, and fully participate in their community's activities (Finn, 1989). The requisite of a community goes further than shared goal and participation in a common

practice. In fact, research suggests that there should be an interdependency where individuals become part of something transcending individual selves (e.g., Barab & Duffy, 2000) and be a team member. In our study, the course participants worked together as a team within the context of the course and became interconnected. The instructor's facilitation for all of the students to take part in team-works and collaborative classroom activities was important for membership of all the students in the quasi-community. Here, the students' learning can be viewed as collaboration and engaging in the process of developing a sense of belonging to their community.

To bring the expertise into open.

One of the main features that determine the effectiveness of knowledge sharing processes in a community is for the members to know and be aware of the other members' knowledge (Cross et. al., 2001). Community members' lack of awareness of their peers' knowledge and competencies is one of the barriers in nurturing communities (Lesser & Fontaine, 2004). A quasi-community promotes knowledge sharing through brining into open the knowledge and expertise of its members for others. The pedagogy—including instructor's practice and students' participation—should make available each member's related expertise for the rest of the community. Referring to the test-review example, the instructor asked all of the participants in turn to participate in the activity. Students contributed to the activity by answering questions; by complementing, confirming, or correcting answers; and by showing appreciation for the contributions of their peers. Through this practice, the students collectively participated in the development of their quasi-community's expertise. The following is a typical example:

Instructor: Question eight. Masthead-light. Umm, Tom, what is a masthead-light?

Tom: It's a white light, placed in fore and aft line… showing an unbroken light from right ahead to … twenty-two point five degrees abaft the beam…

Instructor: Uh um, on each side? [yea] Any idea of the range?

Tom: Umm depend on the length of the vessel. Umm…

Instructor: Uh um, it's?

…

Katy: Six miles

Dan: Over fifty meters is six miles, fifty to twenty meters is five and twenty to twelve meters is three and for vessel less than twelve meters in length is an all round white light …center line…

Instructor: Boy you well handled that one. [students start cheering] what a …that was…

Dan: I read this yesterday.

Mack: (*to Tom*) Are you jealous of that? (*laughing*)

Instructor: You jealous? (*Students start laughing*)

Instructor: (*to Dan*) That's pretty good.

Kim: It seems you already knew that.

Instructor: Yea that's good.

Len: That's a nice one.

Mack: Yea, that's a good one.

Katy: Well done.

One of the important effects of questioning all the students in turn was to bring about a possibility. It is evident, from the above fragment, that the participation of students in the practice and sharing their knowledge not only allowed them to evaluate their own expertise—by receiving instant feedback—but also provided opportunities for their peers to know about the expert. This was one of the affordances brought about through the test-reviewing practice. By asking each individual student about a certain question of the test, the instructor gave students their opportunity to demonstrate their relevant expertise. Members were encouraged to elaborate on their respective knowing and competencies regarding the testing activity. Students had many opportunities to evaluate their peers' knowledge and skills related to the objectives of the community. The members showed their appreciation for those peers who demonstrated and provided the community with its required competencies.

The practice made visible each member's relevant knowing and competencies, which was used as a resource for the rest of the community. Without the practice, these resources might have remained hidden or taken a longer period of time for the rest of the class members to discover. We observed that the awareness of community members of each other's knowledge and skills provided possibilities for the members to turn to their peers whenever they needed. This afforded effectiveness of knowledge sharing processes by bringing into open the competencies of its members in relatively short period of time. We observed that the possibilities provided by the practice eased the communication and facilitated the collaboration in the classroom quasi-community.

Affording Culture of Problem-Solving

A quasi-community promotes the culture of problem-solving and allows the students to develop their own situated problem-solving methods. Analogously, at the later stages of the course, the pedagogy asked the class to work on the final hands-on chart-work problems and related sample certification examination. The practice in this part of the course, which included drawing and use of specific tools on the marine charts, were analogous to the competency examination that the participants were preparing to attend. Working on the marine chart sample certification examinations played a dual role and fulfilled the requirements of students' both collective objectives. First, by learning how to use charts by practicing the utilization of the related cultural tools, the course participants gained competency in one of the major skills that they need in their workplace onboard ships. Second, they realized their other object/motive, which was the ability to success in this type of certification examination.

While working on the sample examinations' questions, the instructor initially provided the course participants with the answers of different sections of each question. In so doing, the emphasis of the students' activity shifted from finding the answer to developing a valid process for discovering the answer. The instructor encouraged the students to focus on developing possible methods with which a problem might be solved. He resisted the request from the course participants to provide a template for solving each type of problem. Instead, he supported them to develop their own templates. There were constant collaboration and knowledge sharing between peers. The participants produced their templates with the use of resources, tools, and knowledge available to them in the culture. The instructor then encouraged them to compare their templates with others to appreciate the fact that a problem can be solved using different approaches and methods thus promoted problem solving culture and critical thinking.

The pedagogy of the quasi-community promotes culture of problem solving by encouraging students to aim at developing the situated processes of problem solving rather than solely replicating the existing method of solving problems. This practice is distinctive to some extent from apprenticeship in communities of practice in which the practice is limited to an expert's modeling and apprentice replicating the practice thus bound to the reproduction of the culture (Collin, Brown, & Holum, 1991). In the preceding example, through diversifying and augmenting the practice, the pedagogy afforded to go beyond the mere reproduction of the culture. Encouraging students to generate their own problem-solving methods provide the possibility for the learners to be creative and conscious members of their domain. This allows the community members' agency to expand beyond what is available through conventional apprenticeship. The practice afforded students' contribution to the cultural development of their quasi-community. By enculturation through this activity, the participants develop the problem-solving competencies through appropriating their own situated solutions. Moreover, the practice of students producing their own rubrics and problem-solving methods allow them to develop ownership of their learning.

As both objectives of the course participants were met in this part of the course by working on the marine chart sample exams, the practices dominated the learning experiences, motivated student collaboration and facilitated community development. The competency in working with marine charts and providing appropriate answers to the certification examination's questions required an expertise that the students developed by participating in a similar practice. As the course progressed, the students became competent in working with marine charts and answering these types of tests, which later became evident in the students' very high success rate in the certification examination that they attended at the end of the course.

DISCUSSION

This study was designed as a contribution to developing theory concerning the notion of community of practice (learning). Our research shows how a group of adults in the process of becoming certified practitioners attended a formal educational setting, developed a community, and succeeded in reaching their object/motives. We analyze how the pedagogy motivated them to engage socially, realize their common objectives, afford to pursue their joint enterprise and create a quasi-community. Praxis actively promoted the creation and cultivation of students' community in the classrooms and created an environment in which the participants were afforded to evolve new competencies. We discuss how the quasi-community pedagogy can be co-developed through instructor's practice and the students' participation.

In the quasi-community, the instructor has a decisive role in shaping the context for the community to initiate, develop and evolve. The tasks that the instructor initiated at the start of the course planted the seed of the community development. The praxis played a significant role in facilitating the students' realization of their mutual interest and the instructor's ability to align the pedagogy to incorporate them into community's classroom practice. As the course progressed the instructor's role modified toward mediation of the community tasks. The instructor's role gradually faded from the master in the forground to more promenent moderator in the background. He allowed mastery to be distributed and be shared with other memebrs. This afforded personal growth for and possibilities for inovation by its members—a critisizem with the original notion of the community of practice (Engeström, 2007)—and promoted expanding

the scope of the community. The instructor thereby permitted the community as a whole to realize and grow to its full potential.

The type of community created in this formal educational setting cannot be considered to be the same type as defined in the original concept of the community of practice (Lave & Wenger, 1991). We propose the term *quasi-community* to differentiate between the kinds of communities of practice these authors describe and another type of community that may be observed in formal educational settings. The concept of quasi-community emphasizes both similarities (community) and differences (quasi). For example, the difference between core and periphery is realized differently in formal adult educational settings. In a quasi-community any of the members can act as an old-timer (expert) at one instance and as a newcomer (trainee) in the next. We viewed old-timers as those who have more experience with the task at hand and contribute as a major resource for achieving the objectives of the community.

Memories are the other important aspect of life of the communities. They constitute the culture (rituals, routines, and common knowledge) of that community and emerge as members engage in practice. These collective memories allow the practice to outlive any single individual and become the property of the whole community (Roth & Lee, 2006). These types of memories develop through the life of a community and are visible in any authentic community. School classes tend to be deprived of these memories, as at the end of each school year for administrative purposes classroom disassemble, leading to disappearing of their collective memories (memory, however, exists within the staff community, as their membership turns over only slowly). Nevertheless, as our study showed, praxis may allow the classroom community to bring about and develop its own collective memories—for the relatively short period of time that

the community exists. In a quasi-community, these memories constitute the members' collective related experiences, expertise, and knowing that they bring to the community.

Our study shows that in the context of this course, the absence of end-of-the-course evaluation and grading by the instructor played an important contributory role in the success of the quasi-community. The lack of anxiety of being judged by the instructor redefined the historical power relation between the instructor and the course participants in the classroom. This afforded the instructor to play his role as a resource, facilitator, and manager rather than as the only authority. There was no comparison between participants as the result of course assessments thus students viewed each other as resources, not competitors. This in turn promoted the development of interpersonal communication, which was vital for community development. It was not in the focus of this paper to discuss the effects of conducting assessment by a third party, but in the context of the case that we presented this approach facilitates the formation of an activity system that afforded the participants' authentic learning. The instructor utilized the assessment as a means to allow students to develop the competencies they needed and to authentically evaluate students' progress throughout the course.

In this study, success on the test is treated as the object/motive—the final product as seen in the course of actually having it in hand. The competency and mastery of members of this community in producing this product developed through their continual progressive participation in the production and reproduction process. We are convinced the same could be true for any other collective objective of members of the quasi-community. The fact that in this case study the *test* is a common object/motive should not limit the lesson that can be learned from this research. The test here should not be compared with the test-driven motivation, which plagued the educational system (including the maritime education). Here the test is treated as any other

possible object/motive that the community might have for example such as personal and collective growth, competency in specific skill, understanding, etc.

This study shows how in an adult formal educational setting, an object/motive is created when a common goal emerged for learners to work collectively to accomplish success. Through the practice, course participants consciously realized their objectives and were motivated, thus fully participated in the course tasks. Put differently, course participants and instructors find themselves legitimately drawing on one another by a force that is both social and professional, a force that mediates instruction and learning. Our study shows that if praxis affords, classrooms can (at least) be authentic quasi-communities.

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