OUTLINES - CRITICAL PRACTICE STUDIES

• Vol. 14, No. 1 • 2012 • (41-72) • <u>http://www.outlines.dk</u>

Community of Learners: Ontological and non-ontological projects

Eugene Matusov, Katherine von Dyuke, and Sohyun Han

Department of PsySoBioAntEntymology, University of xyz 123

City, Country

Abstract

Our analysis reveals two major types of "Community of Learners" (COL) projects in education: instrumental and ontological. In instrumental COL, the notion of "community" is separated from the notion of "instruction" in order to reach some preset endpoints: curricular or otherwise. We notice three main instrumental COL models: relational, instructional, and engagement. Ontological COL redefines learning as an ill-defined, distributed, social, multi-faceted, poly-goal, agency-based, and situated process that integrates all educational aspects. We will consider two ontological COL projects into: narrowly dialogic and polyphonic.

Section heading

Some time ago in the 1990s, I (the first author) decided to visit one public innovative school, run as "a community of learners." When I called one of the school leaders and asked if I could come on Tuesday to see the school, the leader replied that they did a community of learners only on Mondays, Wednesdays, and Fridays. I asked what happened on Tuesdays and Thursdays and she replied that they did regular instruction. Her answer about doing a community of learners only on certain days surprised me then. How can a community be on certain days and not on others? Imagine that a family exists only on certain days and not on others: Mondays, Wednesdays, and Fridays two people relate to each other as husband and wife, or mother and her child but on all other days, they are perfect strangers! Deviation from family relations are often called "cheating" and viewed as betrayal and infidelity. The idea of "family" or "community" suggests openness to, mutuality of, and commitment to the relationship. The idea of having such relation one day and not the other seems to deny the very meaning of the relationship implied by notion of community. However, I doubt that the leaders of that innovative school, and probably some other educationalists, sensed this dissonance that I experienced - and this was also surprised us. For example, a scholar who read a previous draft of the manuscript commented, "As I am sure the authors are aware, COL is often used as a shorthand to describe a full curriculum with specific participation structures, problem spaces, and curricular resources. If the COL project that this innovative school was engaged in was something like Fostering a Community of Learners (Brown and Campione's version), it would be no more strange for the person contacted to say that they did not run 'community of learners' on Tuesdays and Thursdays, than it would be to say, 'we don't teach music on Tuesdays and Thursdays." It became clear to us that different educators and educational scholars understand the notion of "Community of Learners" (CoL) VERY differently.

This incidence and many other observations and readings about self-proclaimed "community of learners" schools and classrooms, led us to believe that there are at least two big distinct ways or two big families of approaches to understanding the notion of CoL. We call the first one a "non-ontological" or "instrumental" model in which CoL is viewed a process that can be switched on and off by the involved educators or narrowly as a means for achieving non-CoL goals. In this model, the CoL serves something else: for more effective learning, for providing more comfort to the students, for avoiding or reducing disciplinary problems, for developing metacognition, and so on. In this pedagogy, the notion of curriculum is separated from the notion of community, the teaching curriculum is often separated from the notion of instruction, and so on (cf. "educational fallacies", Whitson, 2007).

As a result, students often are not ontologically engaged in their own learning. Students' ontological engagement in their education (Matusov, 2009) means that when the students are asked why they do what they do in school, "Why are you doing that?", the students find the source of the activity in themselves (e.g., "I like it," "I want to find out...", "I want to learn that...", "it is useful for me because...") or in the activity (e.g., "it's fun", "it is interesting"). When students are engaged in the learning activities ontologically, their whole personality exists in their learning while this ontological learning penetrates the whole existence of the students "here-and-now" – they are "in the flow", often forgetting time (Csikszentmihalyi, 1990). In contrast, in non-ontological engagement, the students see the reason for their classroom and homework activity in the teacher or the school institution (e.g., "it's required", "it's good for my future"). When asked why the teacher has assigned a particular learning activity, the students usually reply that they do not know. It seems that in the non-ontological CoL model, students often do not actively invest in and have ownership for their own learning and when they do, it seems to be accidental to the non-ontological CoL project.

In the ontological CoL model, the CoL is viewed not as an instrument or means for promoting something else but as the end in itself, an encompassing educational philosophy (Rogoff, Matusov, & White, 1996). Using Aristotle's term, the ontological Community of Learners is "the final cause" of the pedagogy (Falcon, 2008). The CoL concept defines learning, instruction, curriculum, the participants' relations, motivation, assessment, and the other aspects of pedagogy. In this model, all participants of the classroom community are seen as active learners who define and set learning tasks, provide each other with guidance, define what learning is, why to learn, and why and how to assess it. The success of the ontological COL project is defined by how active the participants are in these

activities and processes. We have a clear bias toward the ontological CoL model and we will try to justify our bias here.

In both models, we refer to CoL as a pedagogical project because both models are prescriptive : they set some pedagogical goals for running a classroom in a certain, desired way, according to some ideal model and criteria for success. Vast amounts of the literature on CoL are about creating (Keiny, 2001; McAuley, 2001; Parson, 1997; Wineburg & Grossman, 1998), building (Aanderud, 2007; Barth, 2000; Educational Resources Information Center, 1995), developing (Matusov, Hayes, & Pluta, 2005; McGrath, 2003; McLoughlin, 1999), designing (Matusov, 2001; Moller, 1998), fostering/nurturing (Bustamante, 2002; Mintrop, 2004; Whitcomb, 2004), maintaining itself while a new generation of participants join the community (Hallinger, Chantarapanya, Taraseina, & Srliboonma, 1996; Matusov, 1999; Matusov & Rogoff, 2002; Rogoff et al., 1996), and assessing -- whether or not a particular institutional educational setting can be called or become a CoL according to certain criteria of CoL (Hannikainen & van Oers, 1999; Hord, Meehan, Orletsky, & Sattes, 1999; Marsh & Richards, 2001; Weir & Terc Communications, 1992; Whipple & Sullivan, 1998). Particular CoL projects and designs guided by these two models may be successful or not, but the definition of the success is different for each model and implicitly or explicitly defined by the model.

The purpose of this theoretical paper is to non-exhaustively abstract from the literature and educational practice, we have researched and investigated, the diverse models of Communities of Learners pedagogical projects and their consequences. Our research question was to make sense of the diversity of self-defined notion of CoL made by both educational theoreticians in literature (i.e., espoused theory of CoL) and in their experimental educational practice (i.e., in-use theory of CoL) and by educational practitioners in their practice (i.e., in-use theory CoL) and in their claims (i.e., espoused theory of CoL). Our research methodology here was to examine claims by educators (e.g., in- and pre-service teachers) and educational researchers about CoL (or somewhat similar notions) (we used searches in the ERIC, PsycInfo, Google Scholar databases, records of our preservice teacher students, our own observations and research). Within our patterns we tried to provide and discuss "generative examples" - examples of CoL both illustrating and generating the described pedagogical pattern of CoL. Our examples are not ethnographical cases. We tried to push the described patterns to their limits in our critical discussion to examine pedagogical values behind them (within our overall bias toward the ontological CoL). Our own position is biased, partisan, and interested toward what we call here ontological CoL projects and against instrumental CoL projects for the reasons we discuss in the paper. We hope this investigation will help educators and educational researchers better recognize this diversity of the CoL projects and clarify what innovative educators mean by CoL and how different and similar they are from each other. It might also contribute in clarifying misunderstandings among each other and promote professional discourse about their educational goals and ideals.

Non-ontological, instrumental projects of CoL

In our view, the birthmark of a non-ontological, instrumental community of learners educational project is that the justification for building a classroom community lays outside of the notion of the community of learners itself. In instrumental models, CoL is a means and a pedagogical tool (e.g., relational, organizational, instructional, curricular) for achieving diverse goals that are not inherently CoL in nature and set outside of the CoL

concept. The instrumental CoL projects often do not call for philosophical revisions of what learning and instruction are and how they are defined by educators (or these revisions have a technological rather than a philosophical nature, not involving values and epistemologies of what learning is, what learning is valued, by whom and why). In this section, we will discuss three common types of the non-ontological, instrumental CoL that we have noticed in teaching practices and/or the literature: relational, instructional, and engagement based on the instrumental goals that the CoL serves in them. They are not mutually exclusive and can overlap in any given instrumental CoL project (e.g., Stepanek, 2000, demonstrates a combination of several instrumental CoL approaches, in our judgment).

Harmonious relations: <u>Relational</u> instrumental classroom communities

In the first instrumental, non-instructional approach, which we call relational CoL, the major justification for employing the notion of "community" or "having sense of a community" is the psychological and social well-being of the students or as some kind of harmonious relationships among them (Schaps, 2003; Solomon, Battistich, Watson, Schaps, & Lewis, 2000), reduction of student-student violence and student undesired behavior (Hawkins, Catalano, Kosterman, Abbott, & Hill, 1999; Jones, College, & College, 2002; Whipple & Sullivan, 1998; Wilson, 2004), social justice and democratic 1999; Paley, 1992), participation (Koshewa, addressing students' alienation (Developmental Studies Center, 1996; Hallinger et al., 1996), and reduction of the use of pedagogical teacher-student violence aimed at making students cooperate with the teacher's demands (Glasser, 1990; Sidorkin, 2002). In his extensive review of CoL, Watkins (2005) called these relational CoLs, "classrooms as communities" (p.51). The proponents of these non-instructional instrumental approaches to CoL argue that when the students have a sense of the community in the classroom they emotionally, motivationally, and cognitively feel better and safer about themselves, the teacher, the other students, and school in general; they learn to solve interpersonal problems in non-violent ways; they have higher motivation for academic learning; their academic test scores go up; there is less bullying, drug use, aggression, dangerous sex activities, participation in gangs, and other undesired behaviors among the students; the teacher can use less coercive methods of making the students cooperate with the teacher's demands; there is growing respect for the teacher and school authority; and so on.

These relational instrumental approaches focus on fostering harmonious relations among the classroom and school participants and suggest several ways to promote building a classroom community. First of all, they often call on teachers for the development of respectful, trusting, warm, and caring relations with the students (Noddings, 1992; Solomon, Schaps, Watson, & Battistich, 1992). Second, to promote student-student and teacher-student shared decision making about curricular order (e.g., in what order to read selected books aloud), interpersonal problem solving (e.g., conflicts, fights), and classroom management, for example, shared development of the classroom rules, their application, and revisions during regular class meetings (Developmental Studies Center, 1996; Gathercoal, 1992; Jones & Jones, 1998; Schaps, 2003; Solomon et al., 1992; Stepanek, 2000). Third, to have communal rituals, ceremonies, routines, and signs (Hallinger et al., 1996). Fourth, to provide many opportunities for the students to interact with each other in small groups and, thus, learn better about each other as include cooperative learning (Jones et al., 2002; Slavin, 1995; Solomon et al., 1992). Fifth, the students are provided with choices, autonomy, and responsibilities for their own decision making process (Developmental Studies Center, 1996; Schaps, 2003; Stepanek, 2000). Sixth, Sidorkin (2002) calls for an "exchange of favors" model between the teacher and students, in which the teacher meets the students' social needs which are often non-academic nature in exchange for the students willing cooperation with the teacher's academic demands, in which the students might not see immediate meaningfulness or gratification (Smith & Matusov, 2011). Seventh, it is to develop a school outreach to the families, local communities, and broader society through projects and service learning (e.g., Jones et al., 2002; Mettetal & Bryant, 1996; Solomon et al., 1992). Finally, eighth, it is to promote a collaborative nature in professional development and decision-making among the teachers, school administrators, and policy decision makers (e.g., Allison, Cristol, El-Amin, Garling, & Pissanos, 1998; Hord et al., 1999).

We agree with Watkins who notices the separation of the notion of community and the notion of academic learning in this type of CoL, "The social arrangements which create a sense of community in a classroom can operate well but not necessary implicate the conception of learning which inhibits that classroom" (Watkins, 2005, p. 54). In a strict sense, these non-instructional instrumental approaches should not be called a community of learners, because often learning and instruction are either not mentioned at all (like, for example, in Schaps, 2003; Wilson, 2004) or mentioned as a factor among many other factors (e.g., Jones et al., 2002; Solomon et al., 1992). It is interesting that Solomon et al. (1992) provide their justifications for promoting a community of learners -- building a caring classroom and school community -- by listing problems that can be characterized as inherently CoL-like but relate to student's learning: the students' alienation and disengagement from the academic curriculum and school, decontextualized and meaningless instruction, extrinsic motivation for learning, irrelevancy to the real world, and so on. However, we argue that in relational instrumental CoLs, these CoL justifications do not affect the revision of pedagogy, focusing predominately on the relational aspect of the classroom, they become "Community Plus" (traditional) pedagogy.

In our judgment, Neill (1960), the founder of the famous innovative educational project. "Summerhill," is also a part of this relational non-instructional instrumental approach to CoL in our judgment. Neill directly addressed the issue of the separation of CoL relational and non-CoL instructional aspects of his pedagogy in Summerhill. In Summerhill, the children's attendance of academic instruction is voluntary and usually not well attended by the students; while their attendance in the General Assembly, a body the school community has formed as a social problem solving through student selfgovernance, "is not compulsory. but usually well attended" is (http://www.summerhillschool.co.uk/pages/themeeting.html) (see also, Neill, 1960). According to Neill, the children's participation in the General Assembly and their freely chosen self-initiated activities prepare the children for self-initiated inquiries that will lead to an emergence of an authentic desire to attend academic instruction. If the students come to the academic instruction voluntarily through their self-initiated inquiries and authentic desire to learn, Neill argued, it does not much matter how conventional the school instruction is. Neil admitted that in his Summerhill, the instruction was pretty much traditional and at times even boring,

The children have classes usually according to their age, but sometimes according to their interests. We have no new methods of teaching, because we do not consider that teaching in

itself matters very much. Whether a school has or has not a special method for teaching long division is of no significance, for long division is of no importance except to those who want to learn it. And the child who wants to learn long division will learn it no matter how it is taught (Neill, 1960, pp. 4-5).

I learned Latin as a boy--rather I was given Latin books to learn from. As a boy, I could never learn the stuff because my interests were elsewhere. At the age of twenty-one, I found that I could not enter the university without Latin. In less than a year, I learned enough Latin to pass the entrance exam. Self-interest made me learn Latin (Neill, 1960, p. 81).

Apparently according to Neill's idea, when the Summerhill students become active learners, they use the teacher's instruction as a resource for their self-initiated learning. This seems similar to a scholar's attendance at a monotonous presentation on a topic of the scholar's interest at a professional conference. It does not matter how insensitive the presentation to the audience is – as soon as the attending scholar, who has already actively and eagerly engaged in the practice, finds the presentation relevant, the scholar puts in his or her own efforts to engage him/herself in the monotonous presentation in order to learn. However, insensitive instruction can be in the classroom by the teacher, students' volunteer, free-will, participation and activism will compensate its insensitivity. This seems to be a pedagogical logic of the founder of Summerhill and leaders of the Free School movement (Greenberg, 1992; Holt, 1972; Neill, 1960; Rietmulder, 2009). In the Free School movement the goal of building a democratic community, in which students' interests, volunteerism, and non-participation are respected, subordinates, if not even openly neglects, any educational purposes as such. Again, here the social is separated from the educational.

In our view, however, it is rather questionable whether the purposes of building a classroom community of living harmoniously together and pedagogy of academic disciplinary subjects can be kept separate because both realms often put pressure on each other. Pedagogy is inherently relational as learning and guidance involve complex and dynamic transformation of social relations between the teacher and the students, among students, and among the classroom participants and people outside of the classroom (Lampert, 2001). Yet, conventional pedagogy, unilaterally defined by the teacher, by the school, by the curricular state standards, by the accountability tests, necessary credentials, and by the textbooks, often generates rigid hierarchical social relations between the teacher and the students and competitive social relations among the students (Goodlad, 1984; Jackson, 1968; Lortie, 1975; Waller, 1932). Pedagogy itself is an activity that builds specific relations – and in conventional pedagogy these are based on different set of values and rules than the CoL (specially the relational instrumental CoL) – the two do not mix well: the conventional pedagogical instruction is based on one type of relations, values, and rules while the CoL is based on another type of relations, values, and rules. This conventional pedagogy with its rigid hierarcho-competitive social relations apparently becomes incompatible with the notion of a harmonious community developed by the proponents of the relational instrumental CoL approaches. Learning is not only about rerelating to the world but also about re-relating to people who live and learn together.

On the other hand, as a phenomenon, community is essentially pedagogical. The notion of a community of people living together, what is often called a "caring community," if defined outside of the learning practice in the instrumental approaches to CoL, unavoidably spills out into the realm of pedagogy and vice versa. If social conflicts can be solved collaboratively in the classroom, why not the academic curriculum and instruction - the core business of school – be defined collaboratively as well? Community building is not only a way to live together, but is also a way to learn together as learning is a part of living. We argue that the separation between a "caring community" and its pedagogy is not sustainable, the two relational paradigms will clash. Either conventional pedagogy takes over and "a caring community" is just a token of the teacher's manipulation to make the students willing subjects of the teacher's pedagogical actions (Fendler, 1998) or the community is seen as a psycho-social therapeutic way to reduce the relational tension caused by the non-communal conventional pedagogy, OR "a caring community" takes over pedagogy by making academic learning accidental at best and a token at its worst (e.g., a caring community can be built around mutual entertainment instead of learning).

The third possibility is that "a caring community" can ontologize academic pedagogy – the CoL can become ontological and not instrumental anymore. There have been suggestions that the notion of caring for others (Noddings, 1992) or for oneself (Foucault, 1988; Plato, 1997) extended to pedagogy can make it meaningful, ontological, communal, and contextual for the participants. Indeed, it is logical to assume that a teacher's deep care about his or her students' wellbeing would spread the meaningful human relations into the realm of his or her pedagogy and would not allow his or her caring classroom community to function around entertainment rather than around learning (which may or may not have an entertaining aspect). A genuinely caring teacher can neither simply cover a state mandated curriculum, nor simply entertain the students all the while ignoring their educational interests, strengths, concerns, and needs (those in the present and the future). However, in this case of the teacher's ultimate caring, the justification for building a classroom community should stop being non-instructional and instrumental but rather it must become instructional and ontological.

Division of labor CoL: <u>Instructional</u> instrumental communities

Instructional instrumental approaches to CoL usually justify the pedagogical value of the notion of community for education by pointing out that the CoL can help to organize instruction in such a way that it promotes better and more effective learning than other, non-communal, instruction (see, for example of such justifications, Crawford, Krajcik, & Marx, 1999). For example, Stepanek (2000) argues that instruction organized as CoL promotes teacher accountability, students' academic achievement, students' motivation for academic learning, and meeting the high state standards. Similarly, Ann L. Brown and her colleagues studied teaching reading comprehension and they found that communal instruction promotes more effective "learning outcomes" than non-CoL instruction (A. L. Brown, 1997). The CoL instruction deepens the students' engagement in the academic discipline (Watkins, 2005) and leads to the students' "productive disciplinary engagement" (Engle & Conant, 2002). However, in our judgment, the concept of learning as measured by traditional psychological and educational tests and the used pedagogical design, narrowly understood as a division of labor, are not affected by the notion of CoL themselves. The non-CoL definition of learning allows the researchers to make easy comparisons between the learning outcomes of CoL versus non-CoL instructions and thus advance advocacy for this type of CoL within the conventional educational system.

Communally organized instruction often involved a certain division of labor among the students such as in "reciprocal teaching", "cooperative learning," and "jigsaw cooperative learning." For example, in reciprocal teaching (A. L. Brown & Palincsar, 1985; Palincsar & Brown, 1984), a group of 6 or so students study some text assigned by the teacher. The

teacher assigns one of the students in the group as a group leader to manage the group and its discussions of the assigned text by asking comprehension, clarification, prediction, and summarization questions such as ""Do I understand?" "That doesn't make sense," "They [the audience] can't understand X without Y," and so forth" (A. L. Brown, 1997, p. 406) and teacher-initiated "driving questions" (Crawford et al., 1999). This peer teaching is called reciprocal because of the division of labor and because in a next learning activity with a new text, the leader is rotated so all students experience being a guiding leader and being a mere learners in the group of learner.

This division of labor, assigned by the teacher in a learning activity, promotes interdependency among the students (Crawford et al., 1999) and the necessity for the students to interact and cooperate with each other in order to contribute to the success of the group activity (as defined by the teacher), that is, the so called community is predicated on cooperation necessary for survival (Matusov & White, 1996). Students must share, as each member is privy to only part of the puzzle. Expertise is deliberately distributed (Brown et al., 1993) but is also the natural result of students majoring in different areas and domains of knowledge, "... Members of the community are critically dependent on each other. No one is an island; no one knows it all; collaborative learning is necessary for survival. This interdependence promotes an atmosphere of joint responsibility, mutual respect, and a sense of personal and group identity" (A. L. Brown, 1997, p. 411). The learning activities, organized around ill-defined "authentic tasks" designed by the teacher, are aimed to be similar to ones that practitioners deal with in real life (Crawford et al., 1999). Distributed functions and roles among the group participants promote a certain discourse in the group that is usually strongly shaped by the teacher's guidance: the students are assigned to ask certain types of questions and moved to the certain types of goals which are defined by the teacher. It is assumed (and being tested) that in this special discourse the desired knowledge and skills will emerge in the students.

In these instrumental approaches, the community is defined instructionally as a certain way of organizing learning activities through the division of labor among students set in small groups. Thus, it is an *instructional* approach to CoL. But it is also an instrumental, *non-ontological*, approach. The CoL instruction can be switched on and off depending on the teacher's pedagogical needs and goals. For example, a classroom can function as a CoL on Monday but not on Tuesday, it can be used in reading and science but not in math, in study of one topic and not another, in study concepts but not in memorization of the multiplication table, and so on.

A CoL-instruction is often used as an instrument for non-CoL learning. The learning outcomes, toward which the CoL instruction is directed, themselves are often viewed outside of the notion of community as psychological skills, knowledge, and abilities, detached from their activities, goals, and uses, such as planning, metacognition, mastery of strategic knowledge, successful long-term recall and retention of the studied material, successful transfer, and so forth that can be measured independently of the CoL processes (and, thus, it can be easily compared with non-CoL instruction and used to meet preset curricular state standards). Often the effectiveness of instructional instrumental CoL is tested by administration of pre-tests and post-tests to students and comparing the "learning gains" or "learning outcomes" after the CoL and non-CoL instructions (A. L. Brown, 1997; A. L. Brown & Campione, 1994, 1998; Johnson & Johnson, 1991). For example, reading comprehension was assessed by the percentage of correct answers given by the students about information in the text (A. L. Brown & Campione, 1994). The questions

and the correctness of the answers were defined unilaterally by the researchers in direct contradiction with the social nature of interpretation and comprehension – the points that the researchers themselves state (A. L. Brown, 1994, 1997; A. L. Brown, Campione, Webber, & McGilly, 1992) -- without noticing the contradiction between their non-CoL assessment (and, thus, their definition of learning) and CoL instruction. Brown clearly recognized the communal nature of comprehension, "Reciprocal teaching involved the development of a mini-learning community, intent not only on understanding and interpreting texts as given, but also on establishing an interpretive community (Fish, 1980) whose interaction with texts was as much a matter of community understanding and shared experience as it was strictly textual interpretation" (A. L. Brown, 1994, p. 7). However, she did not discuss the non-CoL nature of her own learning assessment - i.e., that interpretative, hermeneutic communal learning cannot be coded using a non-contested (objective) criteria of quality of students' understanding and knowledge known in advance by the educational researchers and the teacher. On the top of that, the produced texts and interactions cannot be accessed by community outsiders. The concept of CoL calls for redefining learning and the research approaches for studying it. Educationalists subscribing to the instructional instrumental approaches seem to continue using non-CoL definitions of learning; as the acquisition of preset curricular endpoints assessed by traditional ways of educational research using pre and posttests like Brown and her colleagues have been done.

It is possible, however, that Brown and her colleagues see the preset curricular endpoints of comprehension in reading and in science as the students' joining "a consensus among the most relevant people in the society" (cf. Latour, 1987) and this is how they probably resolve for themselves the contradiction between their CoL instruction and non-CoL assessment and curriculum. Disagreements and controversies are valued as promoters and markers of the students' engagement in and ownership of their own learning (Engle & Conant, 2002) and viewed as temporary and requiring a resolution (and spreading expertise among the members of the group), "Ms. Wingate [the teacher] next underscored each student's accountability to the group by suggesting that a consensus was required to resolve the problem" (Engle & Conant, 2002, p. 440). In this instrumental understanding of CoL, the students' diversity of meanings is a necessary, although temporary, condition for learning and comprehension, "The increased consensus building during group work due to the role of the teacher as a guide parallels findings in earlier studies in a middle school project-based classroom studying acid rain" (Crawford et al., 1999, p. 715) or "One of Barbara's [the teacher] goals has been to transform her class to a community of learners. Barbara does not see herself as the authority in the classroom. Instead she wants to be, in her own words, an 'orchestra leader' who pulls together children's individual voices and individual ways of thinking and making meaning, challenges and extends their thinking, and facilitates the achievement of shared understandings" (Varelas, Luster, & Wenzel, 1999, p. 229)¹. Apparently, in instructionally instrumental approaches to CoL, this

¹ However, Varelas and her colleagues seem to be ambivalent about making the collective consensus as the curricular endpoint of learning as they added, "Building consensus does not necessarily mean that all--teacher and students--come to see a situation, phenomenon, or idea in the same way. Consensus may imply that the group agreed to disagree on certain issues based on specific reasoning and made this agreement explicit" (p.230). It becomes very difficult to understand what the notion of "achievement of shared understanding" means in this case beyond

interpretative communal diversity has to be resolved and eliminated through "reaching" a consensus and "arriving" at the conventional knowledge. We put these two words "reaching" and "arriving" in quotations because, in our view, consensus in community is always local and temporary in the long run – nothing is potentially out of the participants' questioning (Morson, 2004). In our view, the possibility that students may legitimately not develop consensus with experts (and each other), either through their unanswered questions or even due to their misunderstandings, is apparently undervalued in the instrumental CoL model of education. Being at a difference with the standard curriculum or with the professionally established consensus, if critically and dialogically conceived by the student (and probably even if wrong), might be evidence of critical thinking skills and therefore higher achievement. Setting a communal consensus as a teaching goal invites pedagogical violence and/or pedagogical manipulation (Matusov, 2009). The conventional knowledge of a shared consensus, constantly sought in school, is always based on "authoritative discourse" and not on "internally persuasive discourse" (Bakhtin, 1991; Matusov & von Duyke, 2010).

In our observation, scholars and educators who have been working in instructional instrumental CoL approaches for years have become more and more comprehensive about the instructional notion of community. They start talking about such ontological notions as classroom culture, identity, agency, discourse, and audience in their analyses. For example, Brown wrote about the formative importance of a real authentic audience for the students' learning projects in her Fostering a Community of Learners (FCL) approach (although she did not discuss the consequences of this audience on the learning assessment and the communal definition of learning), "In telling their story, these students were putting on a performance, for my benefit. Everyone in the community is at some stage an actor and an audience. Regular exhibitions to a variety of audiences are an important component of the community. The sense of $audience^2$ for one's research efforts is not imaginary, but palpable and real. Audiences demand coherence, push for higher levels of understanding, require satisfactory explanations, request clarification of obscure points, and so on. Students do not have to deal only with a single audience, the teacher, as they often do in school" (A. L. Brown, 1994, p. 8). This new foci on the ontological aspects of learning bring increasing pressure on the teacher/researcher towards a communal

the participants' disengagement for the dialogue with each other. Is it "agree to disagree"? In our view, rather than simply "agreeing to disagree" the class could maintain a list their unresolved issues (one of possibilities). Each issue would then be developed from multiple perspectives uncovering subtleties that might have been missed in the teacher's drive towards consensus. Temporary unfolding agreements and disagreements can push the participants to deepen their ideas. Even in disagreement, there would be an appreciation for the greater aspects of complexity and views.

² We wonder how FLC achieve authenticity of the audience in their innovative schools. An audience can be fake -- voyeuristic non-participants (like peers who don't really understand the practice), interactive but otherwise non-participants (like parents), relevant others who participate in the practice out of unconditional support and politeness, OR an interested audience that is dialogical and makes meaning with presenters during and beyond the presentation, and an expert audience capable of giving a summative evaluation (such as a competition). The type of authentic audience acts as a dialogic partner to the level of work and involvement the student engages in. However, a fake, non-authentic audience only increases the pressure on the student but does not put the student in the position of deciding, or collectively deciding the journey.

redefinition of other educational notions beyond narrow instruction: curriculum, assessment, a definition of learning, social relations among the students and between the teacher and the students, and motivation. Until these educators and educational scholars make this leap, in our view, they will remain in the realm of an instrumental, non-ontological, approach to CoL.

Engagement before instruction CoL: <u>Engagement</u> instrumental communities

In pedagogical practice and literature, we have also noticed *engagement* as the instrumental focus for a non-ontological approach to CoL. These approaches are guided by the concern that successful instruction requires a high level of engagement from both the students and the teacher. The later often depends on the former: when the students are engaged, it is easy for the teacher to stay engaged. The students' engagement is measured by their energy, attention, asking questions, efforts, initiatives, persistence, amount of work, and enthusiasm. This is how a teacher of an innovative school discusses the relationship between engagement and instruction,

I'm not feeling their energy. They're working and trying to understand what I'm saying. If nobody has their hand up, after a period of time, I feel like this is heading in a direction that kids are going to start losing attention. They're going to start thinking about other things... I was, partly too, you get a feeling, and maybe this is coming from them, is I've been talking a while now, and nobody has any questions. So I should change the direction and try to make it something that they can relate to.... So I think that might be going on ... I can't remember what I did, but I probably started getting them to wake up here and get connected. [So, I can start teaching them again.] (Interview with a middle school science teacher Robert about his physics lesson from an innovative school that is declared to be run as CoL on their website, <u>http://www.ncclschool.com/overview/philosophy.htm</u>) (Smith, 2010).

In an *engagement* instrumental CoL approach, the lesson is usually split by a teacher into two major phases: "an engagement phase" and "an instructional phase." The engagement phase of the lesson is considered as preparation for the instruction phase. The engagement phase often starts the lesson and is also used as needed when the students' engagement becomes low in the teacher's judgment (see example above). It is often desirable for many of those teachers (but still not necessary) that the engagement phase at least loosely relates to the instruction and the targeted curriculum,

A lesson that I taught to sixth graders that fits into my philosophy of *a community of learners* involves global warming, greenhouse gases, and human's impact on their environment. I started off by giving the students a warm-up to do before the actual lesson started. This warm-up acted as *my engagement* because I was hoping to catch their attention as they read the question and had to search in their minds for information from a few days ago. I went over the warm-up as a class discussion, allowing students to share their answers with me, *regardless if they were correct or not*. After the engagement] warm-up, I had a student pass out a worksheet to each person in the class that regarded the four main greenhouse gases" (A preservice teacher's reflection on her middle school science lesson during her teaching practicum, emphasis is ours).

Notice that in the engagement phase this preservice teacher did not concern herself much with whether the students' ideas were correct or not. Perhaps it was because in the teacher's mind it was no time and no need to start instruction. When the teacher felt that

all the students were engaged in a broadly defined theme somewhat related to the instruction, then she stopped the discussion and started her instruction by passing them a worksheet that required effort from the students, who already engaged in the material. The engagement discussion itself apparently did not have much instructional value for the teacher.

Meanwhile, teachers are often concerned that the engagement phase does not take over the instruction phase. I would prefer [students' engaging discussion], up to a point. And sometimes I feel that there are some important points that I wanted to get through, and, and some kids will ask completely random questions that,... this just happened either today or yesterday, where the question led to another question, led to another question, and pretty soon, we were talking about dreams in math class. And that's a topic they love to talk about. And we talked about it for a little bit. And then I realized, OK, let's come back to math class, cause I really did want to have a lesson here. And so, I don't get upset with them, and I don't, I just kind of make a joke about it, I did actually plan to teach you something today about math. It is math class, you know. And we're going to go back to math class. And they're like, ohhhhh!!! Cause they all had questions, all the hands were up, and we were talking about dreams for 5 minutes, and I thought, well, OK (Interview with Robert).

Teachers of this instrumental type of CoL also mistrust the engagement stage not only because it might lead the class from the topic desired and pre-planned by the teacher as Robert stated above but also because the teachers suspect that the students' own engagement stage may lack "big curricular ideas", "[The kids' focus in the activity is] microscopic, the actual little trades that they were making, for some of them, a lot of them, it's the personal, which is hugely important, because if they don't have that personal involvement, and personal connection, then they're not going to remember as much of the big ideas about it, so it's got to be that balance of, what what's important to you about what's happening... Cause, they're not going to, I mean, it's like reinventing the wheel, they're not going to do that" (Interview with Melinda, a middle school math teacher) (Smith, 2008, March). The follow-up instruction stage is necessary to communicate big ideas to the students after they mess up and bubble up with their own ideas during the preceding engagement stage of the lesson. In the engagement instrumental approach to CoL, the students' exploration of ideas are usually allowed to be first and the teacher's instruction is second; while, in contrast, in the instructional instrumental approach to CoL, it is the teacher's presentation of the big ideas that usually goes first and the students' exploration follows it, "[the teacher and visiting experts] serve to introduce the class to the big ideas and deep principles at the beginning of a unit" (A. L. Brown, 1997, p. 406).

In our view, the separation of a lesson into two phases -- engagement and instruction -indicates a problem with guidance. Let us explain why. Learning involves a transformation of the students' subjectivities: their worldviews, opinions, perceptions, attitudes, ideas, ways of thinking, feelings, knowledge, conceptions, values, desires, and motives (Matusov & Smith, 2007). Disengaged or under-engaged students are an indicator of the teachers' lack of access to the students' subjectivities (i.e., intersubjectivity). When instruction is not engaging, it usually becomes insensitive for the students. Sensitive instruction, attuned to the students' needs, perceptions of the world, and interests, requires the instructional, for example, by asking students about their needs, perceptions, and interests about the learning. In our view, disengaged instruction has to be addressed not by adding engagement stages to the lesson but by transforming the instruction to make it more engaging³. Students' disengagement is an indication that instruction must be transformed rather than a signal for the teacher to stop the instruction and switch to the engagement stage of entertaining the students and relating to them socially. Similarly, the students' engagement has to be guided by the teacher rather than they be mostly left to their own devices to let them do whatever is loosely related to the targeted curriculum (or even purely entertaining) as far it is engaging for the students as it is often done in the engagement-instrumental CoL projects.

The upside, we think, of an instrumental CoL, is that students have the chance to participate in collaborative, reflective, respectful communities, at some level. Especially in the FCL, we see students functioning in a manner that seems important in professional communities of practice. Yet, as we attempted to think of the benefit of such CoL's might be to students, we feel the "chicken is before the egg" in that such professional communities emerge (hopefully) from person's interests, questions, commitments, and professional desires, and instrumental CoL's are doing the reverse. We wonder if fostering these behaviors before fostering student's ontological learning engagement is a form of "fake it until you make it", where the person gains behavioral competence, but in "play acting" inquiries lose sight of their genuine inquiries.

Ontological projects of CoL

In this section, we will discuss two types of ontological CoL projects that we call *the dialogic ontological CoL project* and *the polyphonic ontological CoL project*. The birthmark of an ontological⁴ CoL project is its redefinition of learning as a communal concept (Matusov, St. Julien, Lacasa, & Alburquerque Candela, 2007)⁵. In this ontological

³ We treat a student's engagement as a two-way street – it can require the student's efforts but the student has to be meta-engaged or interested in putting his or her efforts to keep him or herself engaged.

We borrow the notion of "ontological" from Sidorkin's work on dialogue in education (and beyond), "...this whole chapter presents an attempt to establish the notion of dialogue as a central fact of human existence, as an ontological concept. The word *ontological* does not refer to just any kind of being, neither does it deal with the existence of dialogue; it refers specifically to human existence. This may not be the most conventional use of the term, but from my point of view, it is the most accurate one. The ontological concept of dialogue explores the place of dialogue in the human way of being. One of the reasons for using the adjective *ontological* is a need to distinguish between what I propose and a number of non-ontological concepts of dialogue. In the context of this book, the very existence of a human being in his or her human quality is a result of dialogue. In the non-ontological conception of dialogue, this relation between dialogue and human existence are reversed: dialogue is treated as secondary to human existence, mainly as a form of communication" (Sidorkin, 1999, p. 7, the italics original). This concept seems has long history of use in philosophy and psychology. For example, consider the following quote from Vygotsky, "In [Piaget's] view, there is not only a logical egocentrism, but an ontological egocentrism. In the child, the logical and ontological categories evolve in parallel" (Vygotsky, 1987, p. 87).

⁵ Watkins introduces a notion of "classrooms as learning communities" that seems to move in the direction of ontological CoL projects by stating that, "A classroom run as a learning community operates on the understanding that the growth of knowledge involves individual and social processes. It aims to enhance individual learning that is both a contribution to their own learning

communal approach, learning is viewed as students joining and transforming the targeted practices and their attending discourses, developing their specific voices in these practices, and becoming competent participants in these practices and discourses (C. A. Brown & Borko, 1992; Chinnappan, 2006; Lave & Wenger, 1991) through transformation of the students' subjectivities and reshaping their knowledge (Chinnappan, 2006; Jonassen, 1997; Matusov & Smith, 2007). In an ontological CoL paradigm, learning is understood as ill-defined, unlimited, relational, authorial, personal, polycultural, contested, non-limited in time and space, involving multiple emergent goals, eventful, and distributed in diverse times, spaces, people, networks of practices, discourses, and topics, and through diverse mediums (Cuthell, 2002; Heath & McLoughlin, 1994; Matusov, 2011a; Matusov et al., 2007; Owens & Wang, 1996; Wenger, 1998b). It contrasts with a non-CoL vision of learning common for conventional mainstream schooling in which learning is often seen as well-defined, self-contained, agreement-based, objective, non-problematic, proprietary, monocultural, limited in time and space, involving one preset goal, and lesson-, classroom-, one medium- and one topic-center, and occurs in the individual head of the student. Consensus, agreement, and shared understanding is not seen as a desired outcome or marker of learning in the ontological CoL paradigm (Kerka, 1996). Rather the goal of school is not just promoting learning in the students but also in noting the students' growing pleasure and deep personal interest in learning and of intellectual reflection as becoming essential to their lives (Barth, 2000; Kerka, 1996). A learner is viewed in the CoL paradigm as the final agent of his or her own learning (Fullan, 1993; Klag, 1994; Matusov, 1999). The ontological CoL's definition of learning contradicts conventional school definition of learning.

The teacher's role is also redefined in ontological CoL. In ontological CoL approaches, teachers have to become learners of the academic subject matter (i.e., epistemological learners learning the subject matter together with the students) as well and not just pedagogical learners who learn how to teach their students better (Matusov, 2009). But how can the teacher learn what he or she already knows? Matusov argues for the social nature of learning not only in the teacher's past but also in the teacher's present. Thus, with not knowing students, the teacher's knowledge is partially collapsed and requires its social restoration (and sometimes transformation), which seems similar to a situation when speaking mastery partially collapses when a person meets interlocutors who do not speak the same language.

Being an epistemological learner is important for at least the four following reasons for the teacher of ontological CoL: 1) engage in authentic dialogue with the students on the subject matter, genuinely searching for information and interested in the students' subjectivities, 2) to model learning to the students through learning themselves, 3) to contribute to production of culture, to be "a person of culture" (Bibler, 2009; Lobok, 2001), and 4) to keep abreast of the pace of changes in society, field, science, targeted practices, and technology, which as it rapidly increases necessitates that constant subject matter learning is essential for both the teacher and the students as a life-long skill (Barth, 2000). In an ontological CoL project, the teacher is expected constantly to learn and re-

and the group's learning) and does this through supporting individual contributions to a communal effort" (Watkins, 2005, p. 57). But in our view, he does not redefine the notion of learning as communal and thus, based in his description, his classrooms as learning communities still remain in essence an instructional instrumental CoL project based on division of labor.

learn the subject matter (Matusov, 2009; Miyazaki, 2007, July; Shor & Freire, 1987) to be Learner#1 rather Expert#1 in the classroom (cf. "learned ignorance", Nicholas, 1954).

Although the CoL participants often have different responsibilities and roles, the boundaries between the learner and the knowledgeable, between the teacher and the student, between the novice and the expert are penetrable by all participants of the CoL (Wineburg & Grossman, 1998). People are not viewed as "more knowledgeable" vs. "less knowledgeable" but rather always differently knowledgeable (Reardon & Mollin, 2009) with genuine interest in each other - "interaddressivity" (Matusov, 2011b). The teacher and the students "together are active in structuring shared endeavors" (Rogoff, 1994, p. 213). In an ontological CoL, the teacher is not the "principal performer", Expert #1, the gatekeeper of truth, the final authority of knowledge but a participant in learning and its primary facilitator. As Learner #1, the teacher is a broker, and a consciousness with "the equal rights" to the students' consciousnesses (Bakhtin, 1999; Matusov, 2007. 2009: Miyazaki, 2006, 2007, July; Morson, 2004; Osterling & Fox, 2004). The latter point is often confused with the idea that the teacher-students symmetry of power to be "in charge," will also be equal -- for example, "No one here [in a CoL] appears to direct others in the interaction; all can make contributions, some of which are taken up while others are not, but no one is ostensibly in charge " (Toohey, Waterstone, & Jule-Lemke, 2000, p. 429). However, the equal rights of consciousnesses means that the participants' contributions are taken equally seriously by all and cannot be overruled by or reference away by any authority or powerful tradition - an "internally persuasive discourse" (Bakhtin, 1991; Matusov, 2007; Matusov & von Duyke, 2010), which allows for the testing of ideas, values, and desires by participants, free from authoritative or uncritical traditional constraints, though not free from ideas which necessarily outweigh and overrule other ideas. It does not necessarily preclude asymmetry in power, in knowledge, or in contributions in the CoL classroom.

From this ontological perspective, the CoL is not just a more effective model than non-CoL within traditional non-CoL definition of learning but rather it re-defines learning and effectiveness themselves by answering to the question "effective for what? (and for whom?)" differently. This makes it difficult to compare the ontological CoL and non-CoL (or non-ontological CoL) models of education empirically (Tolstoy & Blaisdell, 2000).

Dialogic ontological CoL project

In our view, the key in understanding the ontological concept of CoL is in the difference between the notion of "learning" and the notion of "learner." Learner in the ontological project of CoL is not one who simply learns, but one who learns actively and intentionally and who highly values learning. Simply by learning, people do not constitute an ontological community of learners because learning is an aspect and a byproduct of any human activity (Lave, 1992, April). Active intentional learners are characterized, at least, by two related and necessary aspects: 1) being puzzled and perplexed by something (Aristotle & Apostle, 1966; Plato, 1997), having "a point of wonder" (Berlyand, 2009), raising an authentic question that seeks for information, and recognizing his or her own ignorance (see the concept of "learned ignorance" in Nicholas, 1954); and 2) the person's desire to address him or herself to, other people, and the inquiry itself (rather than to suppress it or just leave it unaddressed). Thus, the best evidence of a person becoming a learner is the person asking a genuine, information-seeking, question.

In a conventional mainstream school, the teacher asks many questions but they are mostly quizzing, answer-known questions, and not information-seeking questions (Lemke, 1990; Mehan, 1979; Sinclair & Coulthard, 1975). Thus, from the point of view of the ontological CoL, the conventional teacher asking answer-known questions in the classroom is not a learner since the teacher does not try to learn something and does not have anything puzzling or wondering in the subject matter. In Brown's "Fostering Community of Learners" innovative school, children also ask questions. But often these questions are coming not from the students being perplexed by something but from the teacher, who assigns them to questions to ask in the group. When one of the authors (the first) visited FCL and asked children why they asked the questions about the text they discussed in small groups, I was told either, because the teacher asked us to ask a question, or because it was their role of asking questions – not because the student themselves were genuinely perplexed about something. Though the author also observed the FCL students asking genuine questions coming from their perplexity, FCL was not driven by these genuine questions on a systematic basis, in our judgment.

In ontological CoL projects, the teacher's instruction is organized around the students' puzzling perplexities or points of wonders:

The [third grade] students were working on a computer-assisted spelling program that reported individual results as a statement, such as "19 correct out of 20 or 95%."

Thom: I only missed one this time! [His report showed that he got 15 correct out of 16, or 94%.]

Will: Me, too! I got a 95. [He points to the screen and shows the other student. His report says that he got 19 correct out of 20, or 95%.].

Thom: Hey, why did you get a 95 when I got a 94? We both only missed one. That's not fair!

Will: I think your computer is broken.

Overhearing the students, I planned to raise their conversation as a springboard for a whole-class investigation on the relationship between fractions and percents. That evening, I created a spreadsheet environment in Microsoft Excel ... that simultaneously displays four representations of a rational number, that is, as a fraction, decimal, percent, and pie graph. ... To begin our investigation, Thom and Will shared their conversation, about their spelling scores. Some students agreed that the computer must have made an error; others thought that the computer could be right but were not sure why the percents were different. Although some students thought that the magnitude of the numbers might contribute to different percents, most of the students' conversation focused on the difference between the number of words spelled correctly and the total number of words (Drier, 2000, p. 359).

Please notice that the students' inquiry involves heterodiscursia (Matusov, 2011b) – it has emerged in the social discursive space during a language art lesson but it has mathematical and social justice (i.e., what is fair) aspects (unfortunately, the teacher only pursued a purified math inquiry of this holistic puzzlement losing the important teaching-learning opportunity of mathematization of fairness and the developing social consequences of math modeling, see Matusov et al., 2007). When the problem of fairness was shared with the rest of the class, the other students became engaged in the puzzlement.

Although a person's genuine question can be a solid indicator of his or her puzzling perplexity, the person can be perplexed without asking questions because: 1) he or she does not know yet how to formulate a question articulating his or her perplexity, 2) somebody else can raise the question for him or her, and 3) the person might not be an original author of the perplexity – he or she might join somebody's perplexity (as it is an example above for the other students and the teacher). What is important is being genuinely, ontologically, puzzled and perplexed by something, not the origin of the puzzlement itself.

We call the ontological model of CoL dialogic because an active intentional learner not only gets interested in a puzzling perplexity, but also recognizes it and is willing to address it and the social conditions that surround it, the self, and others. The person does not dismiss his or her own puzzlement but commits to the honest investigation of it with the self and others. Bakhtin (1986, 1999) defined dialogic meaning as a relationship between a genuinely asked question and a genuinely provided reply (which might not be an answer but another question or redefined question).

In an ontological CoL project, the teacher does not wait passively for a puzzling perplexity to spontaneously emerge in students, but actively designs situations that set up conditions for emergence of the student's inquiry to be likely to spontaneously occur for these particular students in this particular academic curriculum. In preparation for a lesson, the teacher in an ontological CoL approach to instruction focuses on developing "dialogical provocations" (Matusov, 2009), "contradictions" (Davydov, 1998; Miyazaki, 2007, July), or "points of wonder" (Berlyand, 2009; Bibler, 2009; Koshmanova, 2006) for the students (and the teacher). This approach is in contrast to what is proposed in an instructional instrumental approach to CoL; in this latter approach, the teacher searches for the curricular "big ideas" (Shulman & Sherin, 2004) that can be divided into "researchable' and 'jigsaw-able' chunks" for the students' groupwork (Mintrop, 2004) or can be garnered from the teacher's "leading questions" (A. L. Brown, 1997) in which the teacher unilaterally plans important ideas that should emerge in the students (the preset endpoints). In the ontological CoL approach, the dialogic provocations and points of surprise are tensions that cross between the students' lives and the targeted practice, so that the historically unfolding discourses can become points of entry for the students - for their surprises, questions, inquiries, interests, concerns, worries, needs, and even frustration - for their ontological engagement (cf. the notion of "funds of knowledge" Moll, Amanti, Neff, & González, 1992; see, for example, Paley, 1992). Dialogical provocations preplanned by the teacher are conceptualized as "a possible curricular journey" in an ontological CoL project (Matusov, 2009). The journey is a negotiation of the students' emerging interests, needs, strengths, goals and so on and the historically unfolding socially important practices and discourses. In this view, the student's existing and emerging interest IS the situated context of the teacher's practice and not academic subject matter per se. The curricular journey is always for both the teacher and the student. There is a professional switch from the teacher being Expert #1, as it is in a conventional mainstream education, to being a guide in the practice of learning. We call for a curricular analysis and further investigations of such journeys in ontological CoL projects.

In an ontological CoL, the classroom curriculum is defined not by the prepared provocations or teacher-preset "big ideas" but by fully and partially shared puzzling perplexities of the participants -- emerging, unfolding, and addressing in the lesson (and

beyond it) (cf. the "curriculum as conversation" notion by Applebee, 1996). The teaching goal in an ontological CoL is not to "produce knowledge" (McAuley, 2001), to "achieve a collective consensus" (Coleman, Rivkin, & Brown, 1997), or to build up "a shared understanding" (Varelas et al., 1999), but rather to help the students to develop their own voices - challenges for and replies to each other and to the historically developed and developing important positions in the studied practices and discourses (Matusov, 2009). Through the students' contributions assisted by the teacher, by the other students, by experts in the practice, by extended communities, and by other sources, the students become legitimate participants in these practices and discourse with their own distinguished voices and, in a sense their participation creates its own discourse community. Gee (2005) argues that there are multi-levels of sub-practices or parallel practices that can be developed as part of the practice of learning which may or may not join or impact the practice as it operates in society. The students do not only become recognized by others as legitimate by how they participate but also by how they transform the practice and its discourse. The quality and success of the students' contributions - their replies and challenges -- are judged and defined by the community itself (that often extends beyond the limits of the classroom) in evaluative dialogic replies of the involved proponents, opponents, and those who have to be convinced about the importance of the unfolding tensions (Latour, 1987; Matusov, 2009).

Polyphonic ontological CoL project

Morson and Emerson (1990) define the Bakhtinian notion of "polyphony" as the participants' recognition of the dialogic nature of truth. In this spirit, we define a polyphonic CoL project as an ontological CoL, one in which all participants are actively involved in developing emergent endpoints as a result of dialogic learning. In a narrowly dialogic CoL, the students' dialogic learning is defined by their responsive authorship, induced the teacher-designed perplexities and the students' active responses to them. However, the students are not active authors of the dialogic provocations and curricular journeys in which they are involved -- they rarely define their own learning goals (Zuckerman, 1999). The teacher remains the solid author of the provocations for the students and, thus, the students' journeys. In a polyphonic CoL project, the students' dialogic learning is defined by their self-generated authorship, in which they become active in authoring their own dialogic provocations and designing their own curricular journeys (see a more detailed discussion of the notion of "authorship" in education in, Matusov, 2011a; Matusov & Brobst, 2012, in press).

In a recent graduate seminar, one of the authors (the first) discussed with his graduate students the nature of their attitude to teacher's assignments. The graduate students complained about how much teacher's assignments, regardless of the nature of these assignments, put them into a survival mode of working for the deadline robbing them of their ownership of their work and setting conditions where they feel that they are working for the teacher and not for themselves. This forces them into the uncomfortable position of being a pleaser of the teacher seeking the teacher's approval rather than of genuinely addressing an issue important for them.

Paradoxically, however, when I asked the students to provide evidence of when they have been ontologically engaged in their own academic and professional learning, they pointed to the classroom assignments and they could not provide any evidence for their selfinitiated academic learning, Regarding ontological engagement beyond my professors' demands - I suppose the best thing I could point you to would be the work I had on my poster at the grad research seminar. Although the poster itself was prepared for the sake of the seminar, the analysis was done for nobody but me - as a means of trying to understand what's going on in that classroom and what to do next (Graduate student#1).

The evidence [of my ontological engagement in academic learning] is that I have locked myself away for over a week now working on putting together research that I have been collecting over the whole semester on issues that I feel passionate about. Yes, this started as an assignment for R's [name of a professor] class, but it's not anymore. It's my own work. I am bending her class rules, including by handing it in later than she wanted the rough draft because I still feel the need and desire to work on it more, you see, because I am not working on it for her, but I am working on it for me! This work is helping me shape what it is that I want to research for my thesis and how. And, although I'm over busting my ass, and I may be pissing her off as the instructor, I don't care because it's worth it for my own learning and for me following my passion! In addition, I am giving up social activities and what non-academics would call "life" because I care about this research so much. I'm sorry that it doesn't perfectly align with your research interest in dialogic pedagogy, but I do think that it is related, and I am going to explore the connection between my research interest and dialogic pedagogy in my final project for you--by my own choice. I could have not cared and done some BS final project just to turn in, but I can't and I won't because my interest and passion and life's work (so far) in ed research means too much to me (Graduate student#2) (Matusov & Brobst, 2012, in press).

In narrowly dialogic ontological CoL, the students seem to appreciate dialogic learning from their own puzzling perplexities promoted by teacher's design of dialogic provocations and journeys organized as teacher-initiated assignments. But at the same time, we hypothesize that the students might feel oppressed by these assignments that rob them of their agency for their own work (Holt, 1972), self-determination (Berlyand, 2009; Bibler, 2009), self-actualization (Maslow, 1943), and prevent them from the authorship of their own dialogic provocations and journeys – the phenomenon described as "[conventional] school toxification" (see, Greenberg, 1992; Llewellyn, 1998; Neill, 1960). The dialogically narrow CoL class is organized not around the students' learning initiatives (self-assignments) but around the teacher's assignments, however good or useful these assignments might be. The assignment chronotope of the conventional monologic classroom (Matusov, 2009) remains, hovering over and suffocating the narrow dialogical CoL.

So far, we failed to find full-blown examples of polyphonic CoL in the literature. One example of an emergence of a polyphonic CoL classroom was my (the first author's) work with an undergraduate student, Amy Spencer , at the Latin American Community Center (LACC) as a part of Amy's 10-week Summer Service-Learning Program (Matusov & Smith, 2011). During the previous fall semester, Amy attended LACC as a part of her teaching practicum for a course on cultural diversity. She noticed that there were many tensions between Puerto-Rican and Mexican teen and preteen girls. Her Service-Learning project was to create a Girls' Club for the quarreling Hispanic teen and preteen girls that would create prosocial relations among them and possibly friendships. Initially, she wanted to model her Girls' Club after her university sorority. After discussions with Amy and the LACC staff on the causes of the girls' conflicts and how LACC solved similar

problem among boys, and after reading some literature on solving ethnic conflicts through collaborative projects (Sherif, 1988), we decided to incorporate projects that would require collective efforts for their successful accomplishment.

Based on her experience with some of the LACC girls, Amy asked the group of mixed Hispanic teen girls (that LACC staff referred as "difficult") to suggest what they would want to do. The girls did not have any suggestions. We had discussed this possibility beforehand and Amy had a "Plan B". She offered to do a quilt out of pieces of colorful diverse fabric from some of the girls' old clothing. The girls enthusiastically agreed to participate in this project. To make a harmonious pattern, the girls had to actively cooperate and coordinate their actions, which intensified their communications. One of the first cross-ethnic conflicts between the Puerto-Rican and Mexican girls was caused by the music that the girls brought to the Club to listen to while working on the quilt project. Amy's initial reaction was to ban the music as it was causing the discord but then she decided to create another project out of it. She suggested creating a Club CD with the favorite songs of all the girls. The girls enthusiastically accepted the project and started working on it. The Club became more and more successful as judged by the rapidly improved relations among the girls and by the fact that the LACC staff started using Amy's Girls' Club as leverage for negotiating for "good behavior" from the "difficult" girls.

At one point Amy came to me looking very tired, and I asked her why she was so tired. She replied that she had to spend many nights doing the tedious mechanical jobs on the quilt and CD projects. She said that the girls wanted to do only creative work and refused to do mechanical work in the projects. Amy added that on the top of that, the girls proposed to do a carnival at LACC to help raise money for a young boy who was injured in a car accident outside the building. She said, "It's crazy for me! I like their idea but I cannot kill myself working for the carnival!" I suggested to her to turn the problem into a learning opportunity for the children. I suggested Amy to resign from all her night work, and to try to convince the girls that the carnival was a bad idea because it required a lot of tedious mechanical work before, during, and after it and that Amy or LACC staff would not do that work. Amy was surprised by my advice. She was worried that this approach would damage the Girls' Club. I replied to her that it would either break it or make it -- it was time to transfer responsibility for this work to the girls.

Afterwards, Amy told me that this meeting was a dramatic turning event for the Club. The girls took Amy's comments seriously and in response promised to accept all responsibilities for the existing projects and the carnival. But Amy did not let it go that easy. She said to them that it was always easy to promise but difficult to deliver. She described in detail how monotonous, non-creative, and boring the work on the projects and the carnival might be. In their response, the girls took a piece of paper and started listing all aspects of the job and who would do it and how. They nominated Amy for the role of their "guest" and "adviser ." Not only did the girls accomplish all the projects and the carnival successfully, but they also volunteered and actively participated in developing and presenting Amy's report for and at the University at the Summer Service Learning Program Forum. As a byproduct of the Club, the Puerto-Rican and Mexican teen girls developed lasting friendships among each other that reverberated to the entire LACC. Since then, girls' fights across ethnic lines stopped at the LACC. The girls learned to develop learning provocations, curricular journeys and self-assignments for themselves.

Joseph Campbell's (1990) research into heroic journeys claimed that these journeys were an ancient, important means of transformation of both the self and the society. The self was often overcoming self-fears in order to bring something good back to the community. We think there is something essential here. It seems the dynamic created by a shared problem that is insurmountable on one's own creates the ground for learning new abilities and responsibilities – we think the two go together in living breathing people. The suffocation of this kind of initiative – initiative similar to one that exhibited by the girls and Amy at the LACC – may bring about life long damage thought stunting the development of a person as it seems often to happen in conventional schools. It is often suggested that character takes initiative, but it may be the other way around, the opportunity to take initiative and independence" (attributed to Abraham Lincoln, but, probably, these words seem to belong to Reverend William John Henry Boetcker, http://www.illinoishistory.gov/facsimiles.htm).

We hypothesize the following necessary (but not sufficient) conditions, for promoting a polyphonic classroom through the emergence of the students' self-assignments and self-journeys (i.e., the students' dialogic agency, see Matusov, 2011a; Rainio, 2008, for more discussion):

1. The presence of free time resources. It is time free from the students' duties and necessities (like concerns about food, place to live, safety, and mandatory assignments) – moving beyond of the "games of survival" (McNeil, 1986; Rainio, 2008) – and free for the student's possible self-assignment;

2. The presence of multiple entries into the targeted activities. Multiple entries involve three related aspects (cf. "a free-choice learning environment" in Falk, Donovan, & Woods, 2001):

a. Enriched activity and learning environment that has multiple-level and multi-medium of support and engagement for the students, access and resources for experimentation;

b. Teacher-defined suggested multiple choices for engagement;

c. Legitimacy and support of the students' choices;

3. Legitimacy of and respect for the students' non-participation and non-cooperation, at least at some point (otherwise, participation is always suspected to be forced and this can be a burden for the students for their initiatives);

4. A sense for the students that they "have a community behind" them (Bakhtin, 1999; Matusov, 2009) and "validation" from important others (Anderson, 2010) that support and nurture the students' voices:

a. Unconditional acceptance of the students by the classroom community even in face of disagreements and mistakes;

b. Taking their contributions seriously for consideration and testing their ideas;

c. Non-hostile responses to the students' contribution;

5. A sense of urgency, interest, transcendence, responsibility, and importance for others of what the students do - a sense supported by the others' addressivity at and responsivity to the students' contributions in the classroom community (and beyond);

This is not an exhaustive list of hypotheses, in our view, and these hypotheses require thorough empirical testing. It is also interesting to study the dynamic aspects of these principles (e.g., as we saw in the case of Amy and the Girls' Club, the responsibility for the activity choices shifted from her to the girls themselves).

Heath and her colleagues seem to find polyphonic CoL models, in which the youth have self-assigned learning journeys, leadership roles, and complex projects, in youth-based organizations (Heath, 1998; Heath & McLaughlin, 1994; Roach et al., 1999). They raised a question whether or such organizations (or polyphonic CoL projects, in our lingo) can be compatible with schooling and whether schooling can incorporate them (Heath, 1998; Heath & McLaughlin, 1994). Although they answer the question positively, we keep it open for now waiting for more pedagogical experimentation in practice. It is clear, however, that conventional schooling with its classroom-lesson-grade organization, focus on educational standards, and forced participation are incompatible with ontological CoL projects and especially with the polyphonic CoL.

Conclusions

Many authors complain that the notion of "community of learners" that emerged in the educational literature in the late 1980s, is somewhat fuzzy (Varelas et al., 1999). We argue that this fuzziness reflects the diversity of the many CoL projects in education. Our analysis reveals two major types of CoL projects: instrumental and ontological. In an instrumental type of CoL projects, community is not defined around active learning redefined in the CoL spirit but rather as a supplement that makes traditional academic non-CoL learning more successful or more bearable for the students. The different aspects of educational process – instructional, curricular, motivational, relational, assessment, and engagement– are often viewed as separate and not integrated with the sense of community. In sum, a CoL is often viewed as means for achieving non-CoL ends. We have noticed the following three main tendencies in current instrumental CoL projects: relational ("Harmonious CoL"), instructional ("Division of labor CoL"), and engagement ("Engagement before instruction CoL"). We wonder if other types of instrumental CoL exist in educational literature and/or practice.

Ontological CoL projects are based on the re-evaluation and re-definition of learning as an ill-defined, distributed, contested, social, multifaceted, poly-goal, heterodiscursive, authorial, not limited in time and space, eventful, and situated process that integrates all educational aspects. It defines a person as a learner when the person is involved in and actively addresses an inquiry, in which he or she has an active stake. The best evidence of being a learner is the person asking a genuine information-seeking question coming from the person's puzzling perplexity. In an ontological CoL, everyone is expected (but not forced!) to ask genuine information-seeking questions within their points of surprise, including the teacher. In an ontological CoL, although the participants are not expected to be symmetrical in their roles, power, knowledge, and contributions in the collective interaction, their roles and functions have often dynamic and penetrable boundaries. Their consciousnesses are assumed to have equal rights to be taken seriously by the person themselves and the other participants within the ontological CoL and not to be overruled by any authority. In narrowly dialogic ontological CoL projects, the participants' puzzling perplexities generate inquiries for classroom investigation in a regime of internally persuasive discourse. These are promoted by, for example, dialogic provocations, mostly designed by the teacher and organized by the teacher in curricular journeys students take.

These more narrowly defined dialogic ontological CoL projects often generate ambivalence in students for completing the teacher-initiated assignments (and, probably, for the dialogic CoL projects in general). On the one hand, students appreciate dialogic learning stemming from their own puzzling perplexities supported and appreciated by the teacher through the teacher's assignments, dialogic provocations, and curricular journeys but, on the other hand, the students feel oppressed and robbed of their own agency by the teacher-initiated assignments. Polyphonic ontological CoL projects are aimed at promoting self-assignment, self-determination, self-provocations, self-leadership, and selfjourney in the students.

We see potential problems with our polyphonic ontological CoL as well. For instance, in a sense we may be forcing a particular form of enculturation of students' subjectivities (Osberg & Biesta, 2010) normalizing a form of agency not desired by some students or communities (Kukathas, 2003). We have positioned learners as "inquirers" – a characterization that deserves to be problematized. This creates problems, for example, in determining if some communities are being underserved educationally compared to others and what does it mean outside of the conventional notion of accountability as students failing tests. We suspect that features of this design might be, nevertheless, fruitfully evaluated, but further work is needed in this area.

As a reader may suspect by now, our own bias is toward ontological CoL in general and polyphonic ontological CoL more specifically. The reason for that is because we are committed to education for agency and critical dialogue focusing on transcending any known norms, values, and practices and testing ideas (Matusov, 2009, 2011a; Matusov, Smith, Soslau, Marjanovic-Shane, & von Duyke, 2012, submitted). We think that these educational values are more in touch with humanity than conventional standard-based notion of learning. The first author and his colleagues has begun working on a pedagogical design based on a polyphonic ontological CoL called Open Syllabus Education (OSE), and we have begun researching this model. It is early to say how polyphonic these ontological CoL projects are. We do not know if our model will be possible in a conventional setting, nor do we think it has been realized in innovative settings.

In the end, we want to raise several issues, waiting for future research to address, about the relationship between conventional mass schooling and the diverse CoL projects. Conventional schooling with its monopoly on curriculum is incompatible with ontological CoL projects but it is somewhat compatible with instrumental CoL projects that do not challenge the conventional monopoly on curriculum. Ontological CoL projects can flourish in places where the monopoly on curriculum is weaken or absent. Also, the existing practice of innovative schooling has shown that CoL projects can be successful in some local islands and never on a mass scale. In addition, so far, we do not know of any successful polyphonic CoL project realized on school grounds (and we encourage our readers to please inform us of them if they are aware of them). Nevertheless, we wonder if mass schooling can incorporate CoL projects in principle. Both mass schooling and existing CoL projects have to be analyzed as a community of practice to address these issues.

References

- Aanderud, Arinn Johnson. (2007). Binding communities: Teachers of English learners' perceptions of building community relationships within their practice. (Thesis MS), University of California at Davis, Davis, CA.
- Allison, Pamela C., Cristol, Dean, El-Amin, Cassaundra, Garling, Jane F., & Pissanos, Becky W. (1998). Constructing a community of learners, leaders, and decision makers. Educational Horizons, 76(2), 92-97.
- Anderson, M. Anthony. (2010). Investigating the impact of an engaged adolescent participation in Hip-Hop pedagogy: An exploration of the educational possibilities of youth culture. (PhD Doctoral dissertation), University of Delaware, Newark.
- Applebee, Arthur N. (1996). Curriculum as conversation: Transforming traditions of teaching and learning. Chicago: University of Chicago Press.
- Aristotle, & Apostle, Hippocrates George. (1966). Metaphysics. Bloomington: Indiana University Press.
- Bakhtin, Mikhail M. (1986). Speech genres and other late essays. Austin: University of Texas Press.
- Bakhtin, Mikhail M. (1991). Dialogic imagination: Four essays by M. M. Bakhtin (C. Emerson & M. Holquist, Trans.). Austin, TX: University of Texas Press.
- Bakhtin, Mikhail M. (1999). Problems of Dostoevsky's poetics (Vol. 8). Minneapolis: University of Minnesota Press.
- Barth, Roland S. (2000). Building a community of learners. Principal, 79(4), 68-69.
- Berlyand, Irina E. (2009). A few words about Bibler's dialogics: The School of the Dialogue of Cultures conception and curriculum. Journal of Russian & East European Psychology, 47(1), 20–33.
- Bibler, Vladimir Solomonovich. (2009). The foundations of the School of the Dialogue of Cultures Program. Journal of Russian & East European Psychology, 47(1), 34–60.
- Brown, Ann L. (1994). The advancement of learning. Educational Researcher, 23(8), 4-12.
- Brown, Ann L. (1997). Transforming schools into communities of thinking and learning about serious matters. American Psychologist, 52(4), 399-413.
- Brown, Ann L., & Campione, Joseph C. (1994). Guided discovery in a community of learners. In K. McGilly (Ed.), Classroom lessons: Integrating cognitive theory and classroom practice. (pp. 229-270). Cambridge, MA,: The MIT Press.
- Brown, Ann L., & Campione, Joseph C. (1998). Designing a community of young learners: Theoretical and practical lessons. Washington, DC: American Psychological Association.
- Brown, Ann L., Campione, Joseph C., Webber, Lynne S., & McGilly, Kate. (1992). Interactive learning environments: A new look at assessment and instruction. In B. R. Gifford & M. C. O'Connor (Eds.), Changing assessments: Alternative views of

aptitude, achievement and instruction. (pp. 121 - 212). New York, NY: Kluwer Academic/Plenum Publishers.

- Brown, Ann L., & Palincsar, Annemarie Sullivan. (1985). Reciprocal teaching of comprehension strategies: A natural history of one program for enhancing learning. Technical Report No. 334. In Anonymous (Ed.), (pp. ED257046. 257103p).
- Brown, Catherine A., & Borko, Hilda (1992). Becoming a mathematics teacher. In D. A. Grouws (Ed.), Handbook of research on mathematics teaching and learning (pp. 209–239). New York: Maxwell Macmillan.
- Bustamante, Dolores M. (2002). Telling our stories, finding our voices: Nurturing a community of learners. Primary Voices K-6, 11(1), 2.
- Campbell, Joseph, Cousineau, Phil, & Brown, Stuart L. (1990). The hero's journey: The world of Joseph Campbell (1st ed.). San Francisco: Harper & Row.
- Chinnappan, Mohan. (2006). Using the productive pedagogies framework to build a community of learners online in mathematics education. Distance Education, 27(3), 355-369
- Coleman, Elaine B., Rivkin, Inna D., & Brown, Ann L. (1997). The effect of instructional explanations on learning from scientific texts. Journal of the Learning Sciences, 6(4), 347-365.
- Crawford, Barbara A., Krajcik, Joseph S., & Marx, Ronald W. (1999). Elements of a community of learners in a middle school science classroom. Science Education, 83(6), 701-723.
- Csikszentmihalyi, Mihaly. (1990). Flow: The psychology of optimal experience (1st ed.). New York: Harper & Row.
- Cuthell, John. (2002). MirandaNet: A learning community--a community of learners. Journal of Interactive Learning Research, 13(1-2), 167-186.
- Davydov, Vasilii Vasilevich. (1998). The concept of developmental teaching. Journal of Russian & East European Psychology, 36(4), 11-36.
- Developmental Studies Center. (1996). Ways we want our class to be: Class meetings that build commitment to kindness and learning. Oakland, CA: Developmental Studies Center.
- Drier, Hollylynne Stohl. (2000). Investigating mathematics as a community of learners. Teaching Children Mathematics, 6(6), 358-363.
- Educational Resources Information Center. (1995). Building a community of learners [microform]. Washington, DC: North Central Regional Educational Laboratory.
- Engle, Randi A., & Conant, Faith R. (2002). Guiding principles for fostering productive disciplinary engagement: Explaining an emergent argument in a community of learners classroom Cognition and Instruction, 20(4), 399 483.
- Falcon, Andrea. (2008). Aristotle on causality. Stanford Encyclopedia of Philosophy. http://plato.stanford.edu/entries/aristotle-causality/
- Falk, John H., Donovan, Elizabeth, & Woods, Rosalie. (2001). Free-choice science education: How we learn science outside of school. New York: Teachers College Press.

- Fendler, Lynn. (1998). What is it impossible to think? A genealogy of the educated subject. In T. S. Popkewitz & M. Brennan (Eds.), Foucault's challenge: Discourse, knowledge, and power in education (pp. 39-63). New York: Teachers College Press.
- Foucault, Michel. (1988). The ethic of care for the self as a practice of freedom: An interview. In J. W. Bernauer & D. M. Rasmussen (Eds.), The Final Foucault (pp. 1–20). Cambridge, MA: MIT Press.
- Fullan, Michael. (1993). Change forces: Probing the depth of educational reform. London; New York: Falmer Press.
- Gathercoal, Forrest. (1992). Judicious parenting. San Fransisco, CA: Caddo Gap Press.
- Gee, James P. (2005). Semiotic social spaces and affinity spaces: The age of mythology to today's schools. In D. Barton & K. Tusting (Eds.), Beyond communities of practice: Language, power, and social context (pp. 214-232). Cambridge: Cambridge University Press.
- Glasser, William. (1990). The quality school: Managing students without coercion (1st ed.). New York: Perennial Library.
- Goodlad, John I. (1984). A place called school: Prospects for the future. New York: McGraw-HIII Book Co.
- Greenberg, Daniel. (1992). The Sudbury Valley School experience. Framingham, MA: Sudbury Valley School Press.
- Hallinger, Philip, Chantarapanya, Panomporn, Taraseina, Patchanee, & Srliboonma, Umporn. (1996). Nourishing the spirit: The role of ritual in building communities of learners. Journal of Staff Development, 17(1), 22-26.
- Hannikainen, Maritta, & van Oers, Bert. (1999). Signs and problems of togetherness in a community of learners.
- Hawkins, J. David, Catalano, Richard F., Kosterman, Rick, Abbott, Robert, & Hill, Karl G. (1999). Preventing adolescent health-risk behaviors by strengthening protection during childhood. Archives of Pediatrics & Adolescent Medicine, 153, 226.
- Heath, Shirley Brice. (1998). Living the arts through language and learning: A report on community-based youth organizations. Americans for the Arts Monographs, 2(7), 1-18.
- Heath, Shirley Brice, & McLaughlin, Milbrey W. (1994). The best of both worlds: Connecting schools and community youth organizations for all-day, all-year learning. Educational Administration Quarterly, 30(3), 278-300.
- Heath, Shirley Brice, & McLoughlin, Catherine. (1994). Learning for anything every day. Journal of Curriculum Studies, 26(5), 471-489.
- Holt, John Caldwell. (1972). Freedom and beyond ([1st ed.). New York: E. P. Dutton.
- Hord, Shirley M., Meehan, Merrill L., Orletsky, Sandra, & Sattes, Beth. (1999). Assessing a school staff as a community of professional learners. Issues ... about Change, 7(1), 1-8.
- Howard, Tyrone C. (2002). "Stripping them at the core:" The emasculation of Black boys in U.S. schools. Paper presented at the American Educational Research Association, New Orleans, LA.

Jackson, Philip W. (1968). Life in classrooms. New York: Holt Rinehart and Winston.

- Johnson, David W., & Johnson, Roger T. (1991). Learning together and alone: Cooperative, competitive, and individualistic learning (3rd ed.). Englewood Cliffs, NJ: Prentice Hall.
- Jonassen, David H. (1997). Instructional design models for well-structured and illstructured problem-solving learning outcomes. Educational Technology: Research and Development, 45(1), 65-94.
- Jones, Vernon F., College, Lewis, & College, Clark. (2002). Creating communities of support: The missing link in dealing with student behavior problems and reducing violence in the schools. Beyond Behavior, 11(2), 16-19.
- Jones, Vernon F., & Jones, Louise S. (1998). Comprehensive classroom management: Creating communities of support and solving problems (5th ed.). Boston: Allyn and Bacon.
- Keiny, Shoshana. (2001). Collaboration as a means of creating a "Community of learners". Journal of Cooperation & Collaboration in College Teaching, 10(2), 85.
- Kerka, Sandra. (1996). Book groups: Communities of learners. New Directions for Adult and Continuing Education, 71(Fall), 81-90.
- Klag, P. (1994). A new look at Invitational Education. The Collaborator, 5(14), 1-2.
- Koshewa, Allen. (1999). Discipline and democracy: Teachers on trial. Portsmouth, NH: Heineman.
- Koshmanova, Tetyana S. (2006). Teaching for democracy in Ukraine: Activity-based developmental and dialogical education. International Journal of Educational Reform, 15(1), 80-96.
- Kukathas, Chandran. (2003). The liberal archipelago: A theory of diversity and freedom. Oxford: Oxford University Press.
- Lampert, Magdalene. (2001). Teaching problems and the problems of teaching. New Haven: Yale University Press.
- Latour, Bruno. (1987). Science in action: How to follow scientists and engineers through society. Cambridge, MA: Harvard University Press.
- Lave, Jean. (1992, April). Learning as participation in communities of practice. Paper presented at the meeting of the American Educational Research Association, San Francisco, CA.
- Lave, Jean, & Wenger, Etienne. (1991). Situated learning: Legitimate peripheral participation. Cambridge, UK: Cambridge University Press.
- Lemke, Jay L. (1990). Talking science: Language, learning, and values. Norwood, NJ: Ablex Pub. Corp.
- Llewellyn, Grace. (1998). The teenage liberation handbook: How to quit school and get a real life and education (Rev., 2nd ed ed.). Eugene, OR: Lowry House.
- Lobok, Alexander. (2001). The probabilistic world: The chronicles of the philosophicalpedagogical reflections of an educational experiment. Yekaterinoburg, Russia: Association of Small Businesses.

- Lortie, Dan Clement. (1975). Schoolteacher: A sociological study. Chicago,: University of Chicago Press.
- Marsh, Connie, & Richards, Kelvyn. (2001). Social inclusion and professional development: Communities of learners--raising some questions. Journal of In-service Education, 27(3), 447.
- Maslow, Abraham H. (1943). A theory of human motivation. Psychological Review, 50, 370-396.
- Matusov, Eugene. (1999). How does a community of learners maintain itself? Ecology of an innovative school. Anthropology & Education Quarterly, 30(2), 161-186.
- Matusov, Eugene. (2001). Intersubjectivity as a way of informing teaching design for a community of learners classroom. Teaching and Teacher Education, 17(4), 383-402.
- Matusov, Eugene. (2007). Applying Bakhtin scholarship on discourse in education: A critical review essay. Educational Theory, 57(2), 215-237.
- Matusov, Eugene. (2009). Journey into dialogic pedagogy. Hauppauge, NY: Nova Science Publishers.
- Matusov, Eugene. (2011a). Authorial teaching and learning. In E. J. White & M. Peters (Eds.), Bakhtinian pedagogy: Opportunities and challenges for research, policy and practice in education across the globe (pp. 21-46). New York: Peter Lang Publishers.
- Matusov, Eugene. (2011b). Irreconcilable differences in Vygotsky's and Bakhtin's approaches to the social and the individual: An educational perspective. Culture & Psychology, 17(1), 99-119.
- Matusov, Eugene, & Brobst, Joe. (2012, in press). Radical experiment in dialogic pedagogy in higher education and its centaur failure: Chronotopic analysis. Hauppauge, NY: Nova Science Publishers.
- Matusov, Eugene, Hayes, Renee, & Pluta, Mary Jane. (2005). Using discussion world wide webs to develop an academic community of learners. Educational Technology & Society, 8(2), 16-39.
- Matusov, Eugene, & Rogoff, Barbara. (2002). Newcomers and oldtimers: Educational philosophy-in-actions of parent volunteers in a community of learners school. Anthropology & Education Quarterly, 33(4), 1-26.
- Matusov, Eugene, & Smith, Mark P. (2007). Teaching imaginary children: University students' narratives about their Latino practicum children. Teaching and Teacher Education, 23(5), 705-729.
- Matusov, Eugene, & Smith, Mark P. (2011). Ecological model of inter-institutional sustainability of after-school program: The La Red Mágica community-university partnership in Delaware. Outlines: Critical Social Studies, 5(1), 19-45.
- Matusov, Eugene, Smith, Mark P., Soslau, Elizabeth, Marjanovic-Shane, Ana, & von Duyke, Katherine (2012, submitted). Dialogism and agency in education. Educational Theory.
- Matusov, Eugene, St. Julien, John, Lacasa, Pilar, & Alburquerque Candela, Maria. (2007). Learning as a communal process and as a byproduct of social activism. Outlines: Critical Social Studies, 1(1), 21-37.

- Matusov, Eugene, & von Duyke, Katherine. (2010). Bakhtin's notion of the Internally Persuasive Discourse in education: Internal to what? (A case of discussion of issues of foul language in teacher education). In K. Junefelt & P. Nordin (Eds.), Proceedings from the Second International Interdisciplinary Conference on perspectives and limits of dialogism in Mikhail Bakhtin Stockholm University, Sweden June 3-5, 2009 (pp. 174-199). Stockholm: Stockholm University.
- Matusov, Eugene, & White, Cynthia. (1996). Defining the concept of open collaboration from a sociocultural framework. Cognitive Studies: The Bulletin of the Japanese Cognitive Science Society, 3(4), 11-13.
- McAuley, Sandy. (2001). Creating a community of learners: Computer support in the Eastern Arctic. Education Canada, 40(4), 8-11.
- McGrath, Diane. (2003). Developing a community of learners: What will it look like and how will it work? Learning & Leading with Technology, 30(7), 42.
- McLoughlin, Catherine. (1999). Culturally responsive technology use: Developing an online community of learners. British Journal of Educational Technology, 30(3), 231-243.
- McNeil, Linda M. (1986). Contradictions of control: School structure and school knowledge. New York: Routledge & K. Paul.
- Mehan, Hugh. (1979). Learning lessons: Social organization in the classroom. Cambridge, MA: Harvard University Press.
- Mettetal, G., & Bryant, D. (1996). Service learning research projects: Empowerment in students, faculty, and communities. College Teaching, 44(1), 24-28.
- Mintrop, Heinrich. (2004). Fostering constructivist communities of learners in the amalgamated multi-discipline of social studies. Journal of Curriculum Studies, 36(2), 141-158.
- Miyazaki, Kiyotaka. (2006). Another imaginative approach to teaching: A Japanese view. Academiea, 4(5), 22-31.
- Miyazaki, Kiyotaka. (2007, July). Teacher as the imaginative learner: Egan, Saitou, and Bakhtin. Paper presented at the the 2nd annual research symposium on imagination and education, Vancouver, Canada.
- Moll, Luis C., Amanti, Cathy, Neff, Deborah, & González, Norma. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. Theory into Practice, 31(2), 132-141.
- Moller, Leslie. (1998). Designing communities of learners for asynchronous distance education. Educational Technology Research and Development, 46(4), 115-122.
- Morson, Gary Saul. (2004). The process of ideological becoming. In A. F. Ball & S. W. Freedman (Eds.), Bakhtinian perspectives on language, literacy, and learning (pp. 317-331). Cambridge, UK; New York: Cambridge University Press.
- Morson, Gary Saul, & Emerson, Caryl. (1990). Mikhail Bakhtin: Creation of a prosaics. Stanford, CA: Stanford University Press.
- Neill, Alexander Sutherland. (1960). Summerhill: A radical approach to child rearing. New York: Hart Publishing Company.

Nicholas. (1954). Of learned ignorance. London: Routledge & Paul.

- Noddings, Nel. (1992). The challenge to care in schools: An alternative approach to education. New York: Teachers College Press.
- Osberg, Deborah, & Biesta, Gert. (2010). Complexity theory and the politics of education. Rotterdam: Sense Publishers.
- Osterling, Jorge P., & Fox, Rebecca K. (2004). The power of perspectives: Building a cross-cultural community of learners. International Journal of Bilingual Education and Bilingualism, 7(6), 489-505.
- Owens, Thomas R., & Wang, Changhua. (1996). Community-based learning: A foundation for meaningful educational reform. Topical synthesis #8. Retrieved June 11, 2008, from http://www.nwrel.org/scpd/sirs/10/t008.html
- Paley, Vivian Gussin. (1992). You can't say you can't play. Cambridge, MA: Harvard University Press.
- Palincsar, Annemarie Sullivan, & Brown, Ann L. (1984). Reciprocal teaching of comprehension-fostering and monitoring activities. Cognition and Instruction, 1(2), 117-175.
- Parson, Paula T. (1997). Electronic mail: Creating a community of learners. Journal of Adolescent & Adult Literacy, 40(7), 560-562.
- Plato. (1997). Complete works (J. M. Cooper & D. S. Hutchinson, Trans.). Indianapolis, IN: Hackett Pub.
- Rainio, Anna Pauliina. (2008). From resistance to involvement: Examining agency and control in a playworld activity. Mind, Culture, and Activity, 15(2), 115-140.
- Reardon, John, & Mollin, David. (2009). Ch-ch-changes: Artists talk about teaching. London: Ridinghouse.
- Rietmulder, James. (2009). The Circle School: An introduction to integral education ideas and practices. Harrisburg PA: The Circle School.
- Roach, Adelma A., Wyman, Leisy T., Brookes, Heather, Chavez, Christina, Heath, Shirley Brice, & Valdes, Guadalupe. (1999). Leadership giftedness: Models revisited. Gifted Child Quarterly, 43(1), 13-24.
- Rogoff, Barbara. (1994). Developing understanding of the idea of the community of learners. Mind, Culture and Activity, 1(3), 209-229.
- Rogoff, Barbara, Matusov, Eugene, & White, Cynthia. (1996). Models of teaching and learning: Participation in a community of learners. In D. R. Olson & N. Torrance (Eds.), The handbook of education and human development: New models of learning, teaching and schooling (pp. 388-414). Malden, MA, US: Blackwell Publishers Inc.
- Schaps, Eric. (2003). Creating a school community. Educational Leadership, 60(6), 31.
- Sherif, M. (1988). The Robbers Cave experiment: Intergroup conflict and cooperation. Middletown, CT: Wesleyan University Press.
- Shor, Ira, & Freire, Paulo. (1987). A pedagogy for liberation: Dialogues on transforming education. South Hadley, MA: Bergin & Garvey Publishers.

- Shulman, Lee S., & Sherin, Miriam Gamoran. (2004). Fostering communities of teachers as learners: Disciplinary perspectives Journal of Curriculum Studies, 36(2), 135 140.
- Sidorkin, Alexander M. (1999). Beyond discourse: Education, the self, and dialogue. Albany, NY: State University of New York Press.
- Sidorkin, Alexander M. (2002). Learning relations: Impure education, deschooled schools, & dialogue with evil. New York: P. Lang.
- Sinclair, J. McH, & Coulthard, Malcolm. (1975). Towards an analysis of discourse: The English used by teachers and pupils. London: Oxford University Press.
- Slavin, Robert E. (1995). Cooperative learning: Theory, research, and practice (2nd ed.). Boston: Allyn and Bacon.
- Smith, Mark P. (2008, March). The attraction and repulsion to dialogue among teachers at an innovative school. Paper presented at the University of Pennsylvania Ethnography Forum, Philadelphia, PA.
- Smith, Mark P. (2010). The parallel discursive universes of teachers and students. (PhD Doctoral Dissertation), University of Delaware, Newark, DE.
- Smith, Mark P., & Matusov, Eugene. (2011). A proposal for a new schooling: Hybrid of reciprocity and authentic dialogue. Review of the book [Sidorkin, A. M. (2002). Learning relations: Impure education, deschooled schools, & dialogue with evil. New York: P. Lang.] Mind, Culture and Activity, 18(3), 297-300.
- Solomon, Daniel, Battistich, Victor, Watson, Marilyn, Schaps, Eric, & Lewis, Catherine. (2000). A six-district study of educational change: Direct and mediated effects of the Child Development Project. Social Psychology of Education, 4(1), 3-51.
- Solomon, Daniel, Schaps, Eric, Watson, Marilyn, & Battistich, Victor. (1992). Creating caring school and classroom communities for all students. In R. A. Villa (Ed.), Restructuring for caring and effective education: An administrative guide to creating heterogeneous schools (pp. 41-60). Baltimore: Brookes Pub. Co.
- Stepanek, Jennifer Smith. (2000). Mathematics and science classrooms building a community of learners: It is just good teaching [microform]. Washington, DC: Northwest Regional Educational Laboratory.
- Tolstoy, Leo, & Blaisdell, Robert. (2000). Tolstoy as teacher: Leo Tolstoy's writings on education. New York: Teachers & Writers Collaborative.
- Toohey, Kelleen, Waterstone, Bonnie, & Jule-Lemke, Allyson. (2000). Community of learners, carnival, and participation in a Punjabi Sikh classroom. Canadian Modern Language Review, 56(3), 421-436.
- Varelas, Maria, Luster, Barbara, & Wenzel, Stacy. (1999). Meaning making in a community of learners: Struggles and possibilities in an urban science class. Research in Science Education, 29(2), 227-245.
- Vygotsky, Lev S. (1987). The collected works of L.S. Vygotsky: Volume 1: Thinking and speech (N. Minick, Trans. Vol. 1). New York: Plenum Press.
- Waller, Willard Walter. (1932). The sociology of teaching. New York: J. Wiley & sons.

- Watkins, Chris. (2005). Classrooms as learning communities: A review of research. London Review of Education, 3(1), 47-64.
- Weir, Sylvia, & Terc Communications, Cambridge M. A. (1992). Electronic communities of learners: Fact or fiction.
- Wenger, Etienne. (1998a). Communities of practice: Learning as a social system. Systems Thinker, 9(5), 2-3.
- Wenger, Etienne. (1998b). Communities of practice: Learning, meaning, and identity. Cambridge, UK: Cambridge University Press.
- Whipple, Edward G., & Sullivan, Eileen G. (1998). Greek letter organizations: Communities of learners? New Directions for Student Services, 81(Spring), 7-17.
- Whitcomb, Jennifer A. (2004). Dilemmas of design and predicaments of practice: Adapting the "Fostering a community of learners" model in secondary school English language arts classrooms. Journal of Curriculum Studies, 36(2), 183-206.
- Whitson, James Anthony. (2007). Education à la Silhouette: The need for semioticallyinformed curriculum consciousness. Semiotica, 164(1/4), 235–329.
- Wilson, Dorian. (2004). The interface of school climate and school connectedness and relationships with aggression and victimization. Journal of School Health, 74(7), 293.
- Wineburg, Sam, & Grossman, Pat. (1998). Creating a community of learners among High School teachers. Phi Delta Kappan, 79(5), 350-252.
- Zuckerman, Galina. (1999). Diagnosing learning initiative. In M. Hedegaard & J. Lompscher (Eds.), Learning activity and development (pp. 235–248). Oxford, UK: Aarhus University Press.