Following the pioneering work of Randy Garrison and colleagues, online teachers in the US and internationally see their discussion boards as communities of inquiry (CoI) which promote sustained communication and higher-level learning. The CoI approach to online discussions is based on John Dewey’s conception of education in which teachers and learners are participants in activities working towards a common goal. Teachers in CoI have three main roles: discussion design and organization, discourse facilitation, and direct instruction. Issues have arisen in research on CoI concerning the effectiveness of each role, of communities of inquiry themselves, and of online discussions generally in promoting sustained communication and higher-level learning. I argue that there is a more fundamental issue at stake; namely, that as currently conceived and practiced, CoI are only loosely based on Dewey’s analysis of the concept of education. Furthermore, I demonstrate with examples from my own research how “new modes of practice” based more firmly on Dewey’s “new order of conceptions” can help CoI achieve their goals.

Dewey frequently used the terms “inquiry” and “community” when analyzing the concept of education, and it is fair to say that he saw schools as communities of inquiry. Furthermore, teachers at his Laboratory School in Chicago designed, organized, and facilitated learning activities for students and


4 See for example, Moon-Heum Cho and Scott Tobias, “Should Instructors Require Discussion in Online Courses? Effects of Online Discussion on Community of Inquiry, Learner Time, Satisfaction, and Achievement,” The International Review of Research in Open and Distributive Learning 17, no. 2 (2016): 123–140.

5 John Dewey, Experience and Education (New York: Collier, 1938), 5.
provided direct instruction when students encountered “blocks in expression” or when their “interest flagged.” Many teachers design and organize learning activities. Common learning activities include discourse facilitation of the type employed in CoI, which is historically associated with what Dewey called “progressive” education, and direct instruction, which is a form of “conservative” education. Dewey was critical of both progressive and conservative education. He believed that “a new order of conceptions leading to new modes of practice” was needed. Dewey saw the role of the teacher as a “guide and leader” in activities intended to promote “social renewal.” If he were with us today, teaching online, he would guide and lead learners as they all together sought to renew their scholarly and professional communities. Unlike communities of inquiry to date, I conjecture that Dewey’s CoI would be as effective in achieving their goals as historians tell us the Laboratory School was in achieving its goals. Most CoI are designed to advance learners’ understanding of current theories and practices. Dewey and his students would be more engaged knowing that the future of their communities depended on them. They would not just focus on understanding current theories and practices, but also on their renewal by the new generation. I tested this conjecture in an IRB-approved study of my own online discussions and found that my students and I were better able to sustain communication and achieve higher-level learning than we had been in the past.

The CoI approach is nowhere more important than in global classrooms, where the need to collapse distances between participants is so great and working towards a common goal can be so effective. In my own emerging global classrooms—teaching history and philosophy of education—I have international students logging in from their home countries, Americans teaching English or serving in the military abroad, and immigrant and native-born Americans living in all regions of the country. In my study, I facilitated discussion by responding to each student individually, providing direct instruction when needed, and always focused on helping them clarify their original contributions to the discussion. The message conveyed was that all

8 Dewey, Experience and Education, 5.
perspectives would be heard and were necessary for renewing our scholarly and professional communities.

THE ONLINE CLASSROOM

Online courses are new forums for teaching and learning. No more than twenty-five years old, it is estimated that over six million undergraduate and graduate students in the US (29.7% of the total) now take at least one course online.11 Online courses carry on a tradition of distance education and independent learning in the US and internationally, going back over 150 years.12 The future of online courses seems clear. In fields such as computer science, advances in technology point toward a new model of teaching and learning: the massive open online course or MOOC. In other fields, improvements in the current model point toward courses which more closely resemble their campus equivalents in terms of the quality of student-student and student-teacher interaction. Even now, this early in their development, the learning outcomes of students in online courses may have equaled and even surpassed the learning outcomes of students in campus courses, though it must be added that many factors are involved here and the gains are not primarily attributable to improved interaction on discussion boards.13

For most of its history distance learning has meant independent learning, with interaction limited to mail and then telephone communication between individual students and their teachers. The first virtual classrooms did not emerge until the 1970s and 1980s with the development of telephone conferencing.14 When university courses went online in the 1990s, the future of the virtual classroom seemed unlimited. The internet opened the door to new forms of synchronous and asynchronous text, audio, and video communication. Today, however, a generation later, the online classroom has come to signify asynchronous text communication on discussion boards.15 Several factors have

---

12 Michael Moore and Greg Kearsley, Distance Education: A Systems View of Online Learning, 3rd ed. (Belmont: Wadsworth, 2012), iii.
14 Moore and Kearsley, Distance Education, 34.
contributed to this development, with cost and flexibility topping the list for both universities and students.

Discussion boards are the heart of online courses in many fields. This is especially true in the humanities and social sciences where teachers use them to promote thoughtful discussion of important concepts and learners see them as “interactive space[s] to adapt, refine, appropriate, and extend their own—and each other’s—learning.” In fully online courses, discussion boards occupy roughly the same place—conducted after weekly readings and before major assignments are submitted—as seminars on campus. The focus of much of the research in this area has been on whether online discussions are as effective as campus seminars in promoting thoughtful discussion and advancing students’ learning, and on improvements that are needed to make them more effective.

**Communities of Inquiry**

A growing body of international research follows the pioneering studies of Garrison, Anderson, and Archer in the 1990s in analyzing online discussions for evidence of communities of inquiry (CoI) which promote sustained communication and higher-level learning. The CoI approach is based on Dewey’s analysis of the concept of education in *The Child and the Curriculum* (1902) and *Democracy and Education* (1916) in which teachers and learners are “participants” in educational activities working towards a “collaborative solution or artifact.” CoI researchers examine discussion board transcripts for evidence of participants’ cognitive presence, social presence, and teaching presence. Cognitive presence is considered “most basic,” while teaching presence is “a means to an end—to support and enhance social and cognitive presence.”

Teaching presence involves discussion design and organization, discourse facilitation, and direct instruction. All three “may be performed by any one participant in a Community of Inquiry.”

Using Dewey’s notion of practical inquiry in *Logic: The Theory of Inquiry* (1938), CoI researchers aim to sustain participants’ cognitive presence through four phases: a *triggering event* (which creates a sense of puzzlement); *exploration* (information is exchanged); *integration* (different ideas are

---


connected); and resolution (new ideas are applied).\textsuperscript{20} CoI researchers also use discussions to lead participants from Bloom’s lower to higher levels of learning.\textsuperscript{21} That is, from initial knowledge, understanding, and application of concepts acquired from readings and other resources, all the way to analysis, synthesis, and evaluation as participants seek to produce a collaborative solution or artifact. Successful discussions are those in which participants sustain communication and advance their learning to integration/synthesis and resolution/evaluation.

CoI research has produced mixed results.\textsuperscript{22} An important finding has been that, for discussions to promote sustained communication and higher level learning, teachers must be active participants in the discussions.\textsuperscript{23} Even then, according to Garrison, “the issue revealed consistently in the research findings is that . . . inquiry invariably has great difficulty moving beyond the exploration phase.”\textsuperscript{24} Garrison cites two main reasons for this failure: the absence in many discussions of “shared goals requiring a collaborative solution or artifact” and, quoting Katrina Meyer, the need for faculty to be “more directive in their assignments.”\textsuperscript{25} As a result of these findings, it has increasingly become common practice in online courses for teachers to participate in discussions most days of the week, to organize discussions as role play or scenarios requiring groups to make a decision or come to a conclusion, and to place more emphasis on direct instruction.\textsuperscript{26} As helpful as these innovations have been, however, the effectiveness of CoI remains an issue; some shared goals are more effective than others in promoting sustained communication and higher level


\textsuperscript{25} Katrina Meyer, quoted in Garrison, 65–66.

\textsuperscript{26} See for example, Ayesha Sadaf, and Larisa Olesova, “Enhancing Cognitive Presence in Online Case Discussions With Questions Based on the Practical Inquiry Model,” \textit{American Journal of Distance Education} 31, no. 1 (2017); Shea, Vickers, and Hayes, “Online Instructional Effort.”
learning. In light of this, a return to Dewey illustrates that if the primary role of the online teacher is to be understood in his terms, discussion design, discourse facilitation, and direct instruction should not serve the purpose of guiding and leading participants—including the teacher—towards just any shared goal, but rather towards the goal of renewing their scholarly and professional communities.

**Dewey’s Analysis of the Concept of Education**

In conservative classrooms at the turn of the 20th Century, learners spent much of their time observing teachers. They listened to teacher lectures and watched teacher demonstrations. In progressive classrooms the roles were reversed; teachers observed and listened to learners engaging in individual and group activities. Dewey envisaged teachers and learners participating in activities together. They would observe and listen to each other. Dewey’s philosophy was premised on the fact that “every one of the constituent elements of a social group . . . in time passes away . . . Education, and education alone,” he said, “is the means of social renewal.” Teachers and students at his Laboratory School in Chicago (founded in 1896) were engaged in a social experiment. Together, they recreated society “on a small scale,” thus helping to ensure its renewal in a new generation.

In educational activities, as Dewey conceived them, teachers contribute “established custom,” while learners experiment with their own ways of doing things. Customs function as hypotheses to be tested; they may or may not help learners achieve their goals. Dewey acknowledged and welcomed the inevitability of change, generation to generation, and incorporated it into his conception of education. Teachers are responsible for “accommodating the future to the past,” which itself implies change; the older generation has to make room in their lives for the new generation. The responsibility of learners is to use the past as “a resource in a developing future.” This responsibility took seriously the inevitability of change, as the new generation has to decide how they will live their lives when the older generation is gone. Vanderstraeten says that education for Dewey is a

---


28 Cremin, *The Transformation of the School*.

29 Dewey, *Democracy and Education*, 3.


32 Dewey, 79.
“participatory, co-constructive process.” The customs that teachers and learners establish together will inevitably be new.

Teachers and students at the Laboratory School engaged in group “occupations,” that is, activities which reproduced “some form of work carried on in social life.” Group III, for example, the six-year-olds, remembering what they had seen on a visit to an operating farm the year before, “planned and executed . . . a miniature farm” of their own. They grew winter wheat for flour, threshed, and milled it, then baked bread for Group I students to serve at mid-morning luncheons. The teachers “adopted as a general principle that no activity should be originated by imitation. The start must come from the child through suggestion; help may then be supplied in order to assist him realize more definitely what it is he wants.” When students became blocked teachers might explain why the block occurred or ask students what they had seen the farmers do in a similar situation, but only if it would help them achieve goals they had set for themselves. Together, teachers and students sought to renew the practice of farming in a new generation. When explanations and reminders failed, however, teachers described and suggested that students try what other farmers did in similar situations. The important thing was to ensure that students knew that their responsibility was to devise and test new solutions to problems. Teachers sometimes even reversed course and suggested that students first consider and then try to improve established custom. As teachers, their responsibility was to do whatever was necessary to help students develop and test new customs. Either way, the group (including the teacher) could learn as much if not more from its “failures” as it could from its successes, as would have been the case in any experiment.

**Deweyan Communities of Inquiry**

Online teachers can be as effective in their classrooms as Laboratory School teachers were in theirs, if they base their practices more firmly on Dewey’s new order of conceptions. To do this, however, they need to clarify the purpose of their discussions and their role as participants. Not only must the discussions aim to produce a collaborative solution or artifact, but the solution or artifact must be intended to renew their scholarly and professional community. Furthermore, in addition to (indirectly) suggesting that the group consider solutions proposed by current practitioners, teachers must design activities which task students (and themselves) to come up with and test new

---

solutions which, the group agrees, might prove to be more successful than current solutions.

**Design and Organization**

When teachers design and organize online discussions they are, from a Deweyan perspective, guides and leaders assisting participants “by prearrangement of material and situation[s].” Their online classrooms recreate their scholarly and professional communities, albeit on a smaller scale. The materials—textbooks, articles, audiovisual files, websites—present the communities’ current practices, while the situations—scenarios, case studies, role plays—challenge all participants, including teachers, to rethink those practices. The goal is to agree on the practices that the community should adopt going forward. Teachers lead by example. They encourage learners to introduce new materials and design new scenarios which challenge all participants, including teachers, to rethink current practices. Thus, teachers and learners teach and learn from each other.

Teachers may decide to focus discussion on controversial issues. The rationale is that significant disagreement among practitioners in the field will challenge discussants to develop their own solutions. Teachers may also decide to raise issues which, though not necessarily controversial, are complex. The issues cannot be finally resolved until all perspectives are taken into account, including learners’ perspectives. Regardless of the focus, participants must be presented with situations in the field that need to be resolved through discussion: unresolved issues, unanswered questions, or problems requiring better solutions. Otherwise, participants will not be challenged to advance their learning beyond knowledge, understanding, and application of the materials they consult, and the purpose of the community of inquiry will not be realized.

The theme of my history and philosophy classes is global education. Unit 1 Discussion Topic 1 asks participants (myself included) to research their local school or school district mission statement—its “philosophy of education”—where they often find that schools aim to prepare students for membership in global society. The Final Project in Unit 6, which students work on throughout the course, is an essay answering one of five questions related to global education, none of which has yet been answered satisfactorily either in the literature or the classroom. In my study, I added a “Getting Started” prompt to each discussion designed to alert students to limitations in the course-provided resources they consult. The history resources, for example, adopted a US national perspective and neglected local and international perspectives. In Unit 1 Discussion Topic 2, I asked students, “Have your parents or grandparents ever talked about what schools were like back in their day? How were schools different then? How were they similar?” I responded to their posts by comparing them to what my parents and students in previous classes told me, and by focusing the group’s attention on each student’s unique contribution.

---

to the discussion. The Getting Started prompt helped my students and myself interrogate the materials we consulted and make our own small contributions. Moreover, students, following my example, were more likely than they had been in previous classes to ask each other similar questions. The questions they posed were designed to help their classmates clarify their original contributions to the topic and to advance the group’s understanding of the topic, which was the ultimate purpose of the discussions. In answering their classmates’ follow-up questions, more students than in previous classes exceeded the three-post, two-response-post minimum requirement for each discussion.

**Discourse Facilitation**

The basic principle of Dewey’s constructivist philosophy is that we learn “by wrestling with the conditions of [a] problem first hand.”\(^\text{38}\) Teachers at the Laboratory School refrained from indicating how they would solve problems—at least not until later in the process—because they wanted to avoid solving the problems for the students. Instead, teachers challenged students to solve the problems themselves. If students encountered blocks or their interest flagged and they couldn’t realize what they wanted, the teachers as experienced practitioners provided assistance but without “direct suggestion.”\(^\text{39}\) As we have seen, they might have explained why the block occurred or asked students to explain it, and they would have encouraged students to experiment with different ways of getting around it. If students’ experiments failed, however, and they were still blocked, teachers, cognizant of their responsibility to represent established custom, would focus students’ attention on the positive start they had made and ask them if they had considered—without describing it as such—something experienced practitioners would do.

In communities of inquiry today, learners are introduced to problems in their field. Nonetheless, before beginning to work on their own solutions, they are instructed to investigate the solutions of experienced practitioners. They then report what practitioners have said and answer questions designed to test their knowledge and understanding of it. To advance the discussion learners analyze each other’s contributions, synthesize them, and evaluate the resulting collaborative solution. The solutions, however, are not to the problems themselves, but to what experienced practitioners have said about them. Learners, in other words, have interacted with the problems second-hand. When learners are asked toward the end of the discussions for their own solutions to problems, with little time left for further research and unable to offer a considered opinion, they cannot do much more than agree or disagree with the experienced practitioners they consulted. In Deweyan CoIs, learners would first read an introduction which presents the problem to be discussed and indicates that it has yet to find an agreed solution. To emphasize the importance

\(^{38}\) Dewey, *Democracy and Education*, 160.

\(^{39}\) Mayhew and Edwards, *The Dewey School*, 68.
of the work that learners will engage in, the introduction might even briefly describe the solutions that have been proposed to date and explain why they have not been agreed to by the academic community. Participants would then do their own research and propose and discuss solutions of their own. The role of the teacher is to facilitate the discussion and assist participants to come up with a new solution, not by providing a direct, “right” solution to the problem, but by using her or his experience as a practitioner to provide possible explanations and pose guiding questions to the group. Acting as a guide and leader the teacher might even suggest that the group investigate in greater depth a solution currently mooted by an experienced practitioner, provided said solution would help clarify the solution that the group has been working towards.

In my study, I asked students to respond to the Getting Started prompt after they read the introduction to a topic but before they learned what philosophers and historians have written about it. Their responses to the prompt about their parents and grandparents’ experience of school resulted in our having to rethink the timelines found, and the themes emphasized, in the course textbook. One student’s mother said she left school in Costa Rica in the 1950s after second grade—some fifty years after it ceased to be common in the US. Several parents remembered teachers in segregated black schools “pushing . . . them to reach their dreams” and a father said that “non-black students” in his integrated school “made him and his brothers feel so UN-safe”—themes found only in the specialist literature.40 A father told stories about being “hit across the knuckles” by Nuns and Brothers using a ruler “metal side down!” and said he deserved it. Finally, a mother said she spoke only French when she started school in Louisiana in the 1950s and her own mother did not go to school at all in the 1920s: “It wasn’t until the 1980’s when she [the grandmother] started learning her numbers and letters. She use[d] to count items using tally marks, and she . . . had to write a mark like an ‘X’ as her name.”

Direct Instruction

Teachers at the Laboratory School provided direct instruction only when students were blocked and realized they could not achieve their goal without it—either on their own or as a result of an explanation or question from a teacher. When Group X students, the thirteen-year-olds, decided to construct a spinning wheel, for example, they “needed to know the ratio of revolution of the small to the large wheel . . . The numerical work involved a division of fractions, and as they were rusty in this, an hour was spent in practice.”41 The practice, seen in isolation, is indistinguishable from conservative forms of teaching and learning. From a Deweyan perspective, however, students were

blocked, and when their teacher asked why they said they needed to divide fractions they couldn’t remember. The teacher’s contribution was to provide established knowledge. The students’ contribution was to use the knowledge as a resource to help them construct the wheel in the way they wanted.

Shea and colleagues have been more successful than most community of inquiry practitioners in designing online discussions which promote sustained communication and higher-level learning. They combine direct instruction and discourse facilitation in a new category they call directed facilitation.\textsuperscript{42} Direct instruction, or “injected knowledge,” is one of seventeen components of directed facilitation.\textsuperscript{43} The primary role of teachers is still to facilitate learner discourse, and injecting knowledge is one means they have available. From a Deweyan perspective, however, the primary role of online teachers is to guide and lead group discourse in which they are active participants. Direct instruction is never injected by the teacher; it is rather a resource that participants may choose to use or not. And although individual learners must wrestle with problems first-hand, their primary aim is not to produce an individual solution, but to contribute to a group solution. The resources that teachers suggest to learners are intended to help them clarify what, from the learners’ perspective, the group must keep in mind when devising its solution.

I responded to each student in the Getting Started thread by focusing the group’s attention on what was or could be the student’s unique contribution to our understanding of the topic under discussion. To ask more from the Costa Rican student, I said her mother must be proud of what she (the student) had accomplished and she responded: “All my brothers and sisters are professional, as well as today, our children. My mother is very proud of all of us, and to us in Costa Rica, educators is the real Army for the country, because it is the vehicle which takes us to a real future.” Regarding a student who described her parents’ experience in segregated black schools with poor facilities and resources but dedicated teachers, I clarified the point she was making by adding from my own research that when a segregated black school in Cincinnati in the 1930s fought for and received equal facilities and resources, because of the dedication of its teachers it was rated as good as or better than city white schools.\textsuperscript{44} To the student whose grandmother did not go to school at all in the 1920s, and who in the 1980s was still counting items using tally marks, all I


could say (in so many words) was Wow! No one in the group could mistake the student’s post as anything other than a unique contribution to the discussion. Our textbook, which focuses on general themes and trends in US history while neglecting the rich local and international contexts in which those themes and trends played out, leaves novice historians with the impression that there is nothing more to be said. This is the opposite of what Dewey had in mind when he spoke of teachers accommodating the future to the past and learners using the past as a resource for a developing future.

**Conclusion**

Garrison, Anderson, and Archer, the founders of the community of inquiry approach to online discussions, see teachers and learners as participants working towards a common goal. Teachers have three main roles: discussion design and organization, discourse facilitation, and direct instruction. Teacher-facilitators assist learners as they wrestle with problems first-hand. They honor the first principle of Dewey’s constructivist philosophy. There is no guarantee, however, that learners will solve the problems or that their solutions will be viable. Teacher-instructors are in a position to tell them how experienced practitioners have tried to solve the problems. They ensure that learners have available to them the best solutions to date. For Dewey, however, if a learner “cannot devise his own solution . . . he will not learn, not even if he can recite some correct answer with one hundred percent accuracy.”\(^{45}\) Learners do not learn from direct instruction how to solve a problem or even how experienced practitioners solve it. The only first-hand experience they get is of what teachers say experienced practitioners do.

Teachers acting as Deweyan guides and leaders draw on the strengths and minimize the weaknesses of teacher facilitation and teacher instruction. If learners are to help renew their scholarly and professional community, they must be given the opportunity to wrestle with its problems first-hand. When needed, however, and only to assist them in making a contribution to new solutions, teachers can indirectly suggest instruction on currently-mooted solutions. Learners, knowing the well-trodden path, are then challenged to search off road for a better way forward. Dewey’s basic principle, “the educational moral” he was “chiefly concerned to draw,” was that learners must wrestle with problems first-hand.\(^{46}\) But the alternative to either furnishing ready-made subject matter and listening to the accuracy with which it is reproduced or leaving learners on their own and expecting them to devise their own solutions to a community’s problems, is to challenge them to work with their teachers to develop new solutions. A group may not agree on a solution or, if they do, the solution may not prove to be viable, but that is not the point. The point is that they have discovered these things for themselves. They

\(^{45}\) Dewey, *Democracy and Education*, 160.

\(^{46}\) Dewey, 159.
advance the community’s understanding of a problem by confirming how difficult it is to reach an agreed solution or by testing and disconfirming a new hypothesis.

In my study, guiding and leading participants in a history and philosophy of education course with a Getting Started prompt that was designed to help us interrogate the textbook and other course resources, led to better appreciation of what we learned from the resources because we could see their limitations. For example, by learning about the development of public education in the US in the 19th century and comparing it with what we learned about its development in Costa Rica in the 20th century, we saw that public education developed earlier in the US but faster in Costa Rica, and we realized that US history is more complicated (and more interesting) than we imagined. Furthermore, it allowed us to pose questions regarding the status of public education in the United States, such as why did it take so long to develop? And by learning a little from course resources about the history of separate black schools in the US in the 19th and 20th centuries and comparing it with what we learned from interviews with some of the students who attended them, we again realized that our history is more complicated and more interesting (not to say more inspiring) than we thought. Again, multiple questions were raised such as why did some blacks (as well as many whites) resist desegregation? Why did they think the risks outweighed the benefits? Although our contribution was “small,” in both cases we helped renew our scholarly community by raising and responding to questions of great importance, and which, we agreed, were underestimated by current practitioners.