The Community of Inquiry:

A Survey of Traditional Classroom and Webcourse Application

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An extraordinary depiction of the ideal community of inquiry is portrayed by Raphael in his fresco, «School of Athens.» Projecting ourselves into the fresco, we believe that we are walking, with Plato and Aristotle, into a community alive with doubt and wonder. The reflective community of inquiry, Lipman tells us, «is a self-critical practice, and all of it is exploratory and inquisitive... inquiry begins because what has been encountered - some aberration, some discrepancy, something that defies being taken for granted - captures our interest and demands our reflection and investigation.»[1] We see this illustrated in the fresco in the figures of Plato and Aristotle, engaged in dialogue. Plato, holding a work of cosmology, points heavenwards, while Aristotle, holding a work of ethics, makes a gesture which expresses his commitment to the life of everyday. In the fresco we find Plato, Aristotle, Parmenides, Heraclitus, Pythagoras, and Socrates engaged in aspects of activity all of which are central to the conception of a community of inquiry: individuals who have a mutual trust and respect and a sense of common purpose, working cooperatively, learning to think for themselves by thinking with others, confronting problems and puzzles through the use of dialogue, and acknowledging alternative points of view. To use Roger Scruton's language, «Such qualities require a social setting. They are not solipsistic achievements like the muscles of a bodybuilder or the mortification of the anchorite.»[2]

There is something else. The School of Athens is not the community. The fresco depicts communities with the school. Or as Lipman insightfully puts it:

> *[W]e soon come to recognize that communities can be nested within larger communities and these within larger communities still, if all hold the same allegiance to the same procedures of inquiry. There is the familiar ripple effect outward, like the stone thrown in the pond. wider and wider, more and more encom-*

passing communities are formed, each community consisting of individuals committed to self-corrective exploration and creativity.[3]

For Lipman, the pond encompasses the classroom, the school, and society at large. On one level, the classroom is at the center of the pond; the activity of dialogue is the pebble that begins the ripple of the procedures of inquiry, turning the classroom into a reflective community of inquiry where the primacy of discussion is recognized. The ripples emanating from the center of the pond - classroom - then cascade to encompass the school, and finally society as a whole. At another level, the center of the pond could be seen as two or three students forming a community of inquiry within the classroom. As this community grows and matures, other communities form, until the classroom is a bundle of communities of inquiry, each community of inquiry operating as an autonomous entity, and interacting with other communities in the classroom.

The specific purpose of this paper is to explore whether «web-based» instruction can be of assistance in transforming the classroom into a reflective community of inquiry. The paper is in three sections. In Section 1 we will define and explicate the community of inquiry, as introduced and explained by the philosopher Matthew Lipman, and what it hopes to accomplish. In Section 2, we will articulate the advantages and problems with implementation of this teaching method. In the final section, we will consider how the Web might function as a community of inquiry to resolve some of these practical problems found in a traditional classroom.

The Philosophy for Children movement, as exemplified in the writings of one of its founders, philosopher Matthew Lipman, urges that the establishment of classrooms as communities of inquiry be started early in the educational process, ideally in the primary grades. The vehicle through which communities of inquiry are to be established is the discipline of philosophy, which cultivates a milieu in which the paradigm of self-critical inquiry is practiced.

For Lipman, Philosophy is the only vehicle which can start the process of self-critical inquiry. Philosophy «encourages thinking in disciplines because it assumes the burden of teaching the generic aspects of the thinking that goes on in any discipline and because it is a model of what it means for a discipline to reflect on and be critical of its own methodology.»[4] Further, Philosophy encourages thinking about disciplines, i.e., in thinking about disciplines Philosophy «often discloses indigenous aspects of a discipline's methodology of which the practitioners of that discipline are not fully conscious.»[5] And finally, Philosophy encourages thinking among disciplines, which counteracts the «provincialism of specialization.»[6] And, as Lipman has demonstrated through the development of the «Philosophy for Children» curriculum, the discipline of philosophy can be readily adapted to the educational needs and abilities of young children. In other words, we can create «Schools of Athens» for children.

The special purpose of this paper is to explore whether «web-based» instruction can be of assistance in transforming the classroom into a reflective community of inquiry. In Section I we will define and explicate the community of inquiry, as introduced and explained by Matthew Lipman, and what it

hopes to accomplish. In Section 2, we will articulate the advantages and problems with implementation of this teaching method. In the final section, we will consider how the Web might function as a community of inquiry to resolve some of these practical problems found in a traditional classroom. Although our experience is limited to the use of «web-based» instruction at the college level, we believe that the lessons of our experience provide and important perspective on the potential and the limitation of «web-based» teaching, a perspective that is applicable to primary and secondary education.

SECTION I: THE COMMUNITY OF INQUIRY

The community of inquiry model for education is a radical notion. As the Spanish philosopher of education, A.T. Lardner explains it:

> *This the truly radical aspect of what is being offered here - a community functioning on the basis of autonomous control, de-centering from the authority, with each participant prevailed upon to control him or herself. What we are implying is a form of anarchism in the best sense, the liberation from authority based on the responsibility to self-control on the part of each individual.*

> *Yet the community of inquiry is radical in an even more profound way, for it calls upon us to summon the courage and have the strength to sacrifice (at least during the sessions) that which may be close to our heart ... our specific ideas, the opportunity to impress with our brilliance.* [7]

The standard paradigm of education is teacher centered; the transmission of knowledge is from the authority figure who knows to someone who does not. If the teacher does not know the subject, then the student cannot learn. The standard of an educated mind is a mind chocked-full of information. [8]

By contrast, in the reflective model of education, i.e. the community of inquiry, the students have a responsibility to be active participants in the classroom. The teacher is a guide and a partner with the student. In this partnership, the teacher is fallible; the student is expected to become reasonable and judicious. Unlike the standard model where the focus is on information acquisition, the focus in the reflective model is on the apprehension and understanding of relationships within the discipline being studied.[9]

This does not imply, however, that the teacher's role in the reflective model is minimal or diminished or that learning occurs by letting students do what they want. Rather, the teacher's role remains central. It is the teacher who manipulates the classroom environment to make it conducive to the establishment of the community of inquiry. It is the teacher who directs the discussion and points out themes that the students in the classroom fail to identify in the course of their discussion. It is the teacher who, through questioning, can suggest alternative views to be considered, «enlarging students'

horizons, never letting complacency or self-righteousness take precedence.»[10] As Lipman, Sharp, and Oscanyan describe it

In this sense, the teacher is a gadfly, encouraging the students to take the initiative, building on what they manage to formulate, helping them question underlying assumptions of what they arrive at, and suggesting ways of arriving at more comprehensive answers. [11]

THE NATURE OF THE COMMUNITY OF INQUIRY

The key concepts in the reflective model are inquiry, community, reasonableness, judgment, autonomy, and higher order thinking. [12]

A. Inquiry and Community

Inquiry, in the reflective model, is about 'the doing' rather than the learning of the end products. The model for the reflective classroom is, according to John Dewey, the process of scientific inquiry, i.e., the investigation of problems by the students themselves.[13] If we do not promote this method of inquiry in the classroom then, in Lipman's words, «we neglect the process and fixate upon the product. When problems are not explored at first hand, no interest or motivation is engendered, and what we continue to call education is a charade and a mockery.»[14]

The concept of the community of inquiry in the reflective paradigm is based on Charles Sanders Pierce's notion of the scientific community and its pursuit of the scientific method. Pierce's notion was that scientists form a community in that, according to Lipman, «they were similarly dedicated to the use of like procedures in pursuit of identical goals.»[15] Lipman broadens Pierce's notion so that a community of inquiry can be either scientific *or* not. The key to being a community is the use of like procedures by members of the group in the pursuit of identical goals. If you were to observe a classroom that had been converted into a reflective community of inquiry, you would find conditions where students listen to one another with respect, build on one another's ideas, challenge one another to supply reasons for otherwise unsupported opinions, assist each other in drawing inferences from what has been said, and seek to identify one another's assumptions.[16]

You would also find that the process would be internalized by the students and that they would come to think in the way of the procedures. In other words, «[they] come to think as the process thinks.»[17] If you were to observe a classroom that had internalized the community of inquiry model, you would observe an environment in which, unlike the traditional model, where the teacher is the dominant force and the students are submissive, where the students and teacher are approaching problems together, all explorers and doers in the attempt to solve the problem. They will want to consider and investigate what is troublesome. They will relish discontinuity, and see this as an opportunity to forge new meaning. [18]

B. Reasonableness

In the reflective paradigm, students also engage in a dynamic that encourages them to develop a tolerance and respect for what is reasonable, not just rational. The affairs of the human realm are not subject to absolute prescription; we live in a world of approximation. As Lipman articulates the point:

> *...many aspects of the world · particularly those that deal with human conduct · cannot be dealt with or formulated with the precision characteristic of science. Approximations are needed, and we have to develop a sense of the appropriate rather than expect our thought and the shape of things to correspond exactly. We must be content to reach an equitable solution, not necessarily one that is right.»*

To be reasonable, means to recognize this. [20]

C. Judgment

Along with reasonableness is the development of the capacity to make judgments, i.e., to judge relationships. «Judgements,» explains Lipman, «are settlements or determinations of what was previously unsettled, indeterminate, or in some way or other problematic.» Thinking is the «process of finding or making connections and disjunctions.»[21] The reflective process helps us to «form better judgments in order that we can proceed to modify our lives more judiciously.»[22]

D. Autonomy

The reflective model also develops autonomy, in the sense that it develops individuals who can think for themselves. Thinking for oneself, however, does not imply that the individual accomplishes this divorced from the community. Indeed, thinking autonomously is, for Lipman, a completely social activity. It is the nature of the dialogic enterprise.

> *In reality, the reflective model is thoroughly social and communal. Its aim is to articulate the friction-causing differences in the community, develop arguments in support of the competing claims, and then, through deliberation, achieve an understanding of the larger picture that will permit a more objective judgment.*[23]

E. Higher Order Thinking

Finally, the reflective model encourages a particularly rich type of thinking, involving our capacities to engage in critical thinking and creative thinking, and the community of inquiry, especially when it employs dialogue, is the social context which best generates this type of thinking.[24] Ultimately, though, the reflective model produces a third type of thinking - complex thinking. In Lipman's words, complex thinking includes «recursive thinking, metacognitive thinking, self-corrective thinking, and all those

other forms of thinking that involve reflection on their own methodology at the same time as they examine their own subject matter.»[25]

The goal of the reflective community of inquiry, then, is to produce excellent thinking. This is accomplished by implementing a methodology that promotes the development of excellent thinking. At the heart of the reflective model is the production of an environment where students are active members in its construction and where the students are interested in pursuing the truth through dialogical inquiry. The teacher in the reflective community, works cooperatively with the students, providing guidance when needed, but mostly acting as a catalyst in the student's pursuit of the truth.

TRANSFORMING THE CLASSROOM TO A COMMUNITY OF INQUIRY: AN EVOLUTIONARY PROCESS

How do we transform the standard classroom into a reflective community of inquiry? The community of inquiry does not appear overnight; it is an ongoing process that involves discipline in, and the continuous practice of, the procedure of inquiry. Above all, as Ann Margaret Sharp tells us:

> *The transformation of classrooms into communities of inquiry necessitates a commitment to the procedure of inquiry itself on the part of each member of the class. Without this commitment there is likely to be one-upmanship, intolerance, foolish questions, inattentiveness and pervasive egocentricity.* [26]

The transformation takes a leader to structure the community of inquiry, and this leader is the teacher. The heart of the community of inquiry in a reflective classroom is autonomous control and individual responsibility. Autonomous control, i.e., the ability to keep a discussion going without the intervention of a teacher, happens only when each member of the classroom takes seriously the method of inquiry. And to take the method of inquiry seriously means taking individual responsibility for seeing that each member of the community adheres to the procedure. By structuring the classroom in accordance with the method of inquiry, the teacher can then start to demonstrate to students the behaviors and qualities necessary for the classroom to work as a community of inquiry. This is not, however, an easy task. The teacher must constantly balance the socialization of students into the community of inquiry, searching for truth, and the development of the individual student. [27]

As the behaviors and qualities of the community of inquiry are successfully internalized by the students, and the group begins to act in an autonomous and responsible manner, the teacher slowly begins to change her classroom persona, receding from an authority figure to, ultimately, a co-participant. This transformation is an evolutionary process. The teacher initiates and guides the dynamic from the traditional teacher-centered model to a model of de-centered autonomy. The speed of the process depends upon the individuals making up the class. However, the real key to transforming the classroom into a dynamic, reflective community of inquiry is the ability of the teacher to live up to the requirements of the community of inquiry. It is no small responsibility: the success or failure of approaching the ideal of the community of inquiry resides with the teacher.[28]

SECTION II: TRADITIONAL CLASSROOM AND WEB-BASED APPLICATIONS OF THE COMMUNITY OF INQUIRY

The community of inquiry develops skills and dispositions that promote excellent thinking. Significantly, many of these skills and dispositions are important to the success of the student not only in school, but also in leading a rich and full life.[29] Further, many of these skills and dispositions can be developed outside of the traditional classroom. On the other hand, some of the skills and dispositions can only be developed within a classroom setting that promotes oral dialogue. In this section of the paper, we will discuss what role web-based instruction might play in advancing a community of inquiry. First, we need to briefly characterize the type of Internet instruction that we are using as a standard for our assessment and also to clarify what place we feel web-based courses ought to play in one's overall education. We then look at those skills and dispositions that can be developed outside of the oral framework of the traditional classroom, and are thus generic advantages to the community of inquiry instructional method. We follow with a brief examination of those factors that seem to require a traditional classroom setting and evaluate how central these features are to achieving a community of inquiry. Do we simply lose these features when we transfer from a traditional classroom to web-based instruction, or is there some compensating characteristic that might be found in an Internet classroom? Finally, in Section III, we will investigate the disadvantages we found in promoting a community of inquiry within a traditional classroom environment. We will attempt to assess the degree of hindrance each disadvantage poses and whether any of these difficulties might be alleviated in a web-based classroom.

When we advocate the considering of web-based instruction as an educational alternative, we have in mind a fully integrated, synergetic model. In particular, the type of web-courses we will be considering, are fully self-contained, which means that the students are not required to purchase any additional instructional materials, and never hold any face-to-face meetings. These web-classes, however, are not mere correspondence courses. Students cannot work independently of their classmates or instructor and successfully complete the course. Threaded bulletin board discussions are a requirement in these web-courses, and participation in bulletin board classroom discussions counts for a substantial portion of the student's grade. A threaded bulletin board discussion is very similar to an organized conversation. A class member posts her contribution to a particular topic and all responses to a posting are indented and listed directly below the original contribution. The Internet course we envision, presents philosophical material in the form of Modules (very similar to book chapters), and require students to analyze the received information with discussion exercises on the bulletin board. These exercises begin with a series of question choices designed to elicit student discussion. For instance, one module introduces five fictional case lives which students can use to evaluate what characteristics might contribute toward achieving a meaningful life. The exercise questions serve as a launching pad for classroom discussions and help to foster a community of inquiry. The course of the discussions, for the most part, is student determined with the instructor's role focusing on terminological clarification and highlighting key points made during these conversations. Many of the web-course's tasks require students to revise their compositions based on classmates' bulletin board questions and responses. Everything is subject to revision and further inquiry.

Despite the many benefits accompanying web-based instruction, we view this medium as fulfilling a supplementary role in education. Much of learning in any disciplinary field requires acquisition of certain social skills, which cannot be mastered through Internet education. Our world has a significant physical domain and students must learn to engage, maneuver and excel within this material reality. The skill of reading body language, the art of oration, and proficiency in the chemistry lab cannot currently be adequately mastered in cyberspace. In short, web-based courses can augment but not replicate traditional classroom instruction. With these caveats in mind, let us now look at the generic advantages of a community of inquiry and discuss how these features transfer to a web-based classroom.

GENERIC ADVANTAGES OF THE COMMUNITY OF INQUIRY

Although the classroom may be a natural setting for the development of a community of inquiry, it is the case that many of the elements of the community of inquiry found in the traditional classroom setting can be transferred to other settings, such as Internet courses. The generic advantages of the community of inquiry instructional method include 1) teaching thinking skills, 2) providing a built-in class interest factor, 3) helping students distinguish evaluative criticisms from *ad hominem* attacks, and 4) developing self-correction skills. Let us examine these generic advantages to ensure that the features are transferable to web-based instruction and thus truly generic.

A. Teaching Thinking Skills

The community of inquiry promotes the development of «thinking skills» rather than «learning skills.» In the traditional education model, learning skills are seen as those skills promoted by the one-dimensional, nonreflective «banking model» of learning. Students come into the classroom as empty vessels and the teacher deposits knowledge into their heads. This knowledge is later to be regurgitated onto a form known as a test. To extent the student can disgorge the contents that were deposited, she is seen as being «educated.» The primary learning skill in the banking model is the skill of memorization.

In the context of the community of inquiry, by contrast, «[t]he focus of the educational process is not on the acquisition of information but on the grasp of relationships within the subject matter under investigation.»[30] To grasp relationships, one must be able to think multidimensionally and reflectively. It involves, in Lipman's view, three types of thinking: critical, creative, and complex. Critical thinking involves reasoning and critical judgment; creative thinking involves craft, artistry, and creative judgment. The mixing of critical and creative thinking creates complex thinking which is reflective. It is:

> *... thinking that is aware of its own assumptions and implications as well as being conscious of the reasons and evidence that support this or that conclusion. Complex thinking takes into account its own methodology, its own procedures, its own perspective and point of view. Complex thinking is prepared to recognize the factors that make for bias, prejudice, and self-deception.*[31]

A webcourse requiring ongoing bulletin board discussion, also promotes thinking skills development. Students are required to provide reasons in support of their conclusions, critically judge class-

mates' positions, and encouraged to consider alternative approaches to the problem. Any classroom, traditional or web-based, which invites discussion, accepts findings tentatively, and operates under a foundational structure requiring respect of persons and logic, can promote thinking skills.

B. Providing a Built-In Interest Factor

In the community of inquiry model of education, students are the creators of their educational experience, not the receivers. Hence, students have a built-in interest in the content and composition of the process and materials used to structure their experience. As creators of their experience, they have a responsibility to help develop a community that functions optimally. They are at once an individual owner and a steward of the community. The student is an owner in the sense that she is responsible for her own personal development; a steward in the sense that she has a responsibility to see that the community operates in a manner that promotes the well-being of all of the members. It is a tension that is particularly receptive to the higher order thinking skills outlined above; a tension that demands the engagement of the students' critical and creative thinking skills.

This advantage of a built-in interest faction can also be replicated in webcourses. A bulletin board dialogue may begin from a set of structured questions, but students can challenge any foundational assumptions implicit in these questions, move the inquiry in a different direction, or pose their own questions to the class. In an Internet course, such as the one we are using as our standard, students determine the path of inquiry. Community members determine the course and content of their, discussions and are responsible for their classroom experiences.

C. Distinguishing Evaluative Criticism from *Ad Hominem* Attacks

Ann Sharp describes the community of inquiry as a progressive dialogue where members build upon contributions from the group. To gain fully from the community of inquiry, you must be willing to have your ideas examined by the other members of the community. In turn, you will have the responsibility for examining the ideas of the other members of the group. The procedures for the community of inquiry call for each individual member of the community to give due deference to each member's ideas. You may not like the member who is putting forth the idea. Indeed you may not like the idea. Regardless, the community of inquiry calls on you to objectively and critically evaluate the idea apart from personality and according to the procedures of logical inquiry. It is very easy to engage in *ad hominem* attack; it is quite another matter to analyze an idea on its merits. *Ad hominem* attack has no place in the community of inquiry. Each member of the community has a responsibility not to engage in such attacks and to ensure that other members do not engage in it. *Ad hominem* attacks destroy the dialogue. And without a functioning dialogue, the community cannot survive.

This community of inquiry advantage appears to be genuinely generic as the understanding of what constitutes a substantive versus personal reproof is acquirable through Internet courses. When students are asked to evaluate their classmates' responses, they are instructed to look at bulletin board

postings for inconsistencies, unsupported assertions and false premises. Any criticism of a particular posting must include reasons that illustrate the alleged flaw to class members. In the event that any postings include *Ad Hominem* attacks, this is pointed out by other students or the instructor. Students learn the art of argumentation and begin to recognize a valid counter-argument. The fact that students have a written record of the ongoing dialogue also seems to alleviate frequent misunderstandings of criticisms.

D. Developing Self-Correction Skills

If the student knows that the ideas you put into the community of inquiry dialogue will be evaluated according the rational procedures of logic, the student then has a responsibility to not take criticisms of her idea personally. The student must develop the skill to look at the responses to her presented idea and then step-back and analyze how her thinking should be changed in the light of the feedback from the community. Indeed, each member of the community should reflect on the idea, the criticism it received and then modify his thinking accordingly.

The ability to develop self-correction skills is transferable to a web-based instructional setting. The web-based course we are using as our model requires that the student revise her answer in light of our weeklong discussion of the material. After reading classmates' postings, students regularly see how their positions might be improved, expanded, or why they might need total abandonment.

Not all of the advantages found in the traditional classroom's community of inquiry, however, are transferable. Let us now analyze what advantages we might give up when we move to a web-based community of inquiry.

NON-TRANSFERABLE ADVANTAGES OF THE TRADITIONAL CLASSROOM'S *COMMUNITY* OF INQUIRY

The central component of the community of inquiry is the dialogue. In the traditional classroom setting, dialogue is purely an oral activity. In this setting, members of the community must have effective skills in listening, oral proficiency, the ability to properly translate visual signals. Unlike the skills discussed above, which can also be developed in nontraditional settings, for the skills of listening, oral proficiency, and visual translation, the community of inquiry must be physically present in a setting like the traditional classroom.

Listening

The ability to understand what another member of the community is saying, requires concentration on what that member is saying, or listening expertise. It is a skill that can only be learned in the company of others. And the success of the dialogue depends on the ability of the members to absorb what other members have said, and to translate and put the other members' thoughts into a meaningful context. Without this skill, it is impossible to properly respond to the other member and contribute to the dialogue.

The development of listening skills cannot be replicated in an Internet classroom environment without extreme costs. Web-based courses are constrained by technology and although audio streaming capabilities would permit students to hear their classmates' dialogue, this technology is not widely available. Audio streaming involves the process of storing a voice recording into a digital sound file for transmission at a later time. By adopting this technology, Internet students could feasibly listen to their classmates' responses. But a primary consideration in deciding what technological features to integrate within a webcourse is how many students might become economically excluded from participation.

Audio and video streaming requires a faster computer processing speed and larger amounts of RAM than a regular bulletin board discussion forum. Since webcourses traditionally endeavor to make education more inclusive, technologically advanced courses are counter-productive. If the economic barriers of audio streaming were overcome, replication of the traditional classroom's dialectic would still require scheduled real-time discussions, which severely impact the flexibility advantages of web-based instruction. Even if a webcourse incorporated a fixed period for dialogue, its ability to foster listening skills is dubious. Audio transmissions would be received sequentially rather than as interactive, member interrupted conversations; body language would be absent, and one can only hypothetically speculate on other deficiencies. Although web-based courses cannot teach listening skills, does Internet instruction offer some compensating feature?

One particular feature comes to mind. Fully self-contained webcourses stress reading and composition skills. The only method of communication is via the written word. Students learn to carefully read the course materials and to parse their classmates' compositions into arguments. You cannot maintain that a given position violates the rules of logic until you can isolate the proposed argument. Through bulletin board discourse, students learn when their writing is ambiguous, if their composition lacks clarity, or when their arguments contain an enthymene. They become aware of these composition deficiencies because their classmates post questions which highlight the problem. A traditional classroom community of inquiry will foster listening skills, but we believe a webcourse community of inquiry can equitably promote reading and composition skills. While a physical classroom obviously requires that students read and write, in a virtual classroom the only method of communication is through the written word. After fifteen weeks of communication solely by composition, we estimate that students have written and read more words than they would in two semesters of traditional classes.

Oratory Proficiency

For a dynamic community of inquiry, it is certainly important to be a good listener. But that is only a part of the requirement of oral dialogue. Members of the community must also be able to orally present their thoughts in an intelligent manner. Without this contribution, the dialogue suffers. Oratory proficiency is gained by responding to others in a face-to-face dialogue situation, such as in a classroom. And it is the duty of each member of the community to make the community a safe place for each member to take risk of verbalizing his thoughts.

For a webcourse to replicate teaching students to think on their feet and verbally respond proficiently, not only would we need to adopt audio-streaming technology, but we would also need to implement regular classroom hours. The art of verbal debate can only be learned in real time settings, where classmates immediately respond to the arguments advanced. Requiring set classroom hours, however, seems to undermine one of the greatest advantages of Internet instruction - the flexibility of when to study. Some have claimed that this single oratory disadvantage precludes any chances of meanin philosophical inquiry using the Internet. Richard Anthone argues that real philosophical inquiry requires both verbal and non-verbal communication. Communication occurs not only through oral language but also by body language. Written dialogues, Anthone claims, are simply impoverished versions of face-to-face oral dialogues. Students must engage in oral discourse, the way Socrates did, in order to learn true philosophy. [32]

While we will certainly not attempt to undermine Socrates' contribution to philosophy, it seems that our discipline currently flourishes most actively in the written word. Philosophers publish journal articles, write books, compose codes of ethics for medical and business professionals, and offer analytical critiques of proposed legislation. We agree with Anthone that philosophical inquiry involves both verbal and non-verbal communication, but the written dialectic is also integral to the perpetuation of philosophy. While we can offer no compensatory feature for web-based instruction's lack of oratory training, it appears that the two modes of community of inquiry compliment each other. The traditional classroom's community of inquiry trains students in oral philosophy while the web-based community of inquiry instructs in written philosophy.

Translating Visual Signals

Another nontransferable advantage found in a traditional classroom community of inquiry is that of visual cues. Not only do we speak with our voices, we also speak with our bodies. The ability to translate visual cues can make us better members of the community of inquiry. If we can gauge when our fellow members are becoming frustrated, puzzled, or bored, we can then make adjustments to our spoken contributions to the dialogue, or we can help to structure the dialogue in a way that addresses the messages being sent from the visual cues. But this skill can only be developed when the community is physically together. What is striking about these skills, is that they are central to the human experience, an experience that is by and large defined by our use of verbal language and our ability to discern meaning from this language.

With Internet courses, community members cannot visually discern cues that are easily recognizable from facial expressions and body language in a traditional classroom. Although the inclusion of audio streaming within a webcourse would only require that the transmitting student purchase a relatively inexpensive microphone, replication of visual signals requires video streaming technology. Adding this feature would necessitate that each student purchase a costly video camera. Obviously, economic factors preclude the feasible inclusion of video transmissions within a webcourse. Is there some alternative feature of web-based instruction which might compensate this for this forfeited advantage?

The anonymity afforded each student participating in web-based instruction precludes teachers and classmates from formulating any biases or expectations based on physical appearances. When teaching a webcourse, we don't know our students' race, age, whether they are handicapped, have numerous body piercings or purple hair. While all of us in good conscience strive not to prejudge or categorize people, we don't always succeed. If a student walks in ten minutes late for class and then falls asleep in the back of the classroom, it is easy to jump to the conclusion that he's just not interested in philosophy. Yet in reality, he could be working a night job to help support his family. With web-based instruction everyone enters the conversation on equal footing. Any stratification that occurs within a webcourse is based solely on discussion contributions and insight. Designer clothing, expensive jewelry or a speech impediment will not affect one's standing within a webcourse.

SECTION III: THE WEB AS A COMMUNITY OF INQUIRY

Having discussed both the generic and traditional classroom advantages for use of the community of inquiry mode of instruction, let us examine some of the disadvantages for the use of this method found in the traditional classroom. For ease of discussion, we will break the disadvantages found in a traditional classroom application of the community of inquiry into three subcategories: time issues, verbal mediation problems, and classroom dynamics issues.

DISADVANTAGES OF THE TRADITIONAL CLASSROOM'S COMMUNITY OF INQUIRY

Ann Sharp characterizes the community of inquiry as a collaborative dialogue where members build logically on the contributions of others. With this teaching method, «students learn to object to weak reasoning, build on strong reasoning ... follow the inquiry where it leads, respect the perspective of others, and engage in self-correction when necessary.»[33] As an active learning process, the community of inquiry also encourages that certain social behaviors be observed. Participants listen to one another, support and amplify well-reasoned views, willingly forego speaking in order to promote the contributions of others, and take «responsibility for getting the dialogue back on track.»[34] Through this ongoing dialogue, students develop trust for one another and learn to overcome any defensive tendencies that arise from having one's position critiqued. The instructor makes sure that the rules of logic are observed and that social respect is maintained, but then joins the community as an equal contributing member. The role of the teacher as an authoritative disseminator of facts withers away with this instructional methodology as community members start controlling the path of inquiry. As we have outlined, this dynamic learning process has numerous advantages, but let us now discuss some of the disadvantages to a community of inquiry of a traditional classroom setting.

As Sharp indicates, the community of inquiry is a progressive dialogue where members build upon contributions from the group. Each conversational response should support or augment a previous contribution, present a novel idea, or show why a former tentative conclusion is flawed. The dialogical process increases the group's understanding of a particular topic with each member's addition. Since the oral discourse develops as ideas accumulate, an abrupt cessation of the dialogue will hinder progress.

TIME ISSUES:

The traditional classroom operates with rigid time constraints. Class sessions are scheduled for a set period of time on specified days of the week. If a community conversation is making tremendous headway, spelling out important distinctions, and arriving at satisfactory provisional truths, when the allotted class period is over, the dialogue must end. The strict schedule confinements of the traditional classroom impede progress. When community members finally reunite at the next scheduled meeting, the excitement of the moment is lost. Key points need recapping; the vitality and energy of the previous meeting has evaporated. Students have to reformulate their ideas, reinitiate the conversation, and basically begin the dialogical process anew. The artificial constraint of time severely affects the natural course of the philosophical dialogue. Yet in a traditional classroom there is no way around time. How serious is this hindrance?

If students are truly engrossed in the philosophical discourse, isn't it possible to continue this conversation outside of class? Lipman seems to view the community of inquiry as not bound by classroom walls. In his novels, characters move from the classroom, to after-school activities to home settings, all the while continuing their philosophical conversations.[35] But is this characterization an ideal or reality? In our teaching experience, student interaction outside of the physical classroom is very limited unless some group assignment is given. The downside to time-restricted community of inquiry dialogues, then, seems minimally problematic. How might web-based instruction alleviate rigid time confinements?

An Internet course, where the community of inquiry conversations are restricted to bulletin board postings, affords students the opportunity to finish transmitting their thoughts to the class prior to exiting the course. Using this medium, students after reading their classmates' ideas, can question assumptions, request support for claims, or concur with judgments by written responses to postings. A student can respond to as many of her classmate's dialogues as she chooses, before signing off from the classroom. With web-based instruction students have the flexibility to finish their conversations. Yet this type of instruction also teaches time-management skills as each exercise, or chunk of philosophical material requiring discussion, has a deadline. Students must make their contributions and any revision of ideas by a given date. Thus time constraints are still present with web-based instruction, but these restrictions seem less impeding to discourse continuity than the constraints presented by the traditional classroom.

VERBAL *MEDIATION* PROBLEMS

In the traditional classroom community of inquiry, three verbal mediation problems arise: speaker delays, irrelevance issues, and slow-thinker exclusion. First, extensive delays can result between the time a student, sparked by a point made in the dialogue, raises her hand and when her speaking turn actually arrives. As with any conversation, speakers take turns presenting their ideas. If the conversation is philosophically engaging, four or five students might be queued up waiting to contribute ideas. When a speaker finally gets the floor, the conversation has often progressed beyond the point that she vas

hoping to contribute to. Speaker delays in the traditional classroom's community of inquiry are necessary for maintenance of organized, respectful dialogues, but these postponements present significant problems. If a student has a particularly salient point to make on the issue under consideration, but has to wait five minutes to articulate this contribution, frustration often mounts. Some who grow tired of waiting put their hand down and don't participate; others with less control jump up and down in their seat or simply blurt out their point. An ideal community of inquiry would permit immediate member contribution but still preserve order.

Secondly, continuity of discourse and irrelevance issues pose additional problems for the traditional classroom. Although Sharp indicates that the whole community of inquiry is responsible for ensuring that the dialogue remains on-track, speaker delays often create disjointed discourse. When a student's turn to speak finally arrives, her contribution might involve a point discussed ten minutes previously. On Sharp's account, «One should follow the dialogue rather than thinking about one's own position on what one is going to say. [36] Yet speaker delays seem to inevitably result in continuity gaps. In the community of inquiry, the course of investigation is member driven. Lipman characterizes the community of inquiry as «not aimless,» but there are times when the philosophical discourse seems to take large detours.[37] Students decide what points of discussion they wish to pursue. In the traditional classroom this freedom to explore interests sometimes results in students taking the inquiry down paths totally unrelated to the previous discussion. And if the student is truly impassioned about the subject, the sidetrack to the inquiry could last quite a while. Sharp characterizes a community where members only «speak when they think they have something relevant to say» and where they «refrain from engaging in extended monologues,» but these verbal mediation problems are difficult to control.» The instructor functions solely as a moderator and community member and cannot exercise authoritative command inquiry's building process. Members are often reluctant to criticize an enthusiastic classmate's contribution and to the student who directed the conversation to what members view as a unrelated path, the contribution might appear wholly relevant. Slow-thinker exclusion is another disadvantage to the orally-based traditional classroom's community of inquiry. Some students don't contribute to the community's dialogue because by the time they have processed all the arguments advanced, the conversation has moved on or the class period is over. Frank Sofo, who surveyed a group of college students after a semester's participation in a community of inquiry based classroom, found that slower thinking was a contributory factor for non-participation. In the course assessment, one student wrote, «It takes a while for the argument and concepts to sink in, so I just listened.»[39] Students who think at a slower pace or who are not familiar with the oral argumentation format are often reticent to contribute, and can easily become spectators rather than participatory community members. Let's us consider what remedies a web-based community of inquiry might present for these verbal mediation problems.

An Internet course with a bulletin board community of inquiry alleviates the speaker delay problem. After reading a classmate's posting, a student can immediately add her contributions to the dialogue by typing out a response. In theory, every student can simultaneously reply to a single posting and not have to wait for the floor. The threaded bulletin board feature also diminishes the irrelevance issues. When students read the messages, the contributor's name and subject are listed on the board and indented for ease of tracking. For instance, suppose that John Jones has posted a response to a starter question asking students if there is a difference between killing and letting die. In his posting, John brings out some apparent distinctions in how the law views an act versus an omission. All replies to

John's posting will be shown as indented under John's name. Community members can easily avoid reading what they deem as irrelevant side-issues, by simply scrolling past any responses to an immaterial conversation. A web-course can also accommodate the slower-thinking student. Written responses allow the less argumentatively adept student to carefully read the assumptions, to posit examples that might falsify a claim, and then to thoughtfully compose a response. Clearly verbal acuity and agility are valuable skills. But by gradually training the slower student in the arts of argument and then moving to a quicker paced response environment, it seems everyone wins. A web-based course can hold real-time classroom discussions to augment the delayed bulletin board conversations. In real-time chat room conversations, students give and receive immediate feedback and thus develop rapidity of thought. Of course, real-time chat rooms have many of the disadvantages of the traditional classroom dialogue.

CLASSROOM DYNAMICS ISSUES

Finally, classroom dynamics issues present difficulties for a community of inquiry conducted in a traditional setting. The physical presence of peers curtails some student's contributions. In Soho's class evaluations, a student indicated that one reason for his minimal participation was «the threat of personal attack.» Other students wrote that they «felt intimidated and decided not to communicate,» lacked confidence in their ideas, or were just too shy to express their thoughts to their classmates.[40] For less confident students, the community of inquiry's oral dialectic often results in an unsafe environment for the sharing of ideas. Members of the community are sometimes less apt to throw out tentative ideas for consideration, when their classmates can immediately challenge and reject them.

The physical classroom also brings with it certain power dynamics. Students, perhaps unknowingly, jockey for positions of dominance within the class. By the third week in a traditional setting, the class usually has divided into strong contributors, hesitant and less self-assured contributors, and spectators. Physical gestures, personal stature or sheer intonation often underscore a dominant student's discussion contribution. Many less outspoken students are reluctant to challenge these stronger contributions. What often results is the subordination of an individual's ideas to that of the group's. Although Lipman views the community of inquiry as a collaborative endeavor, with each person holding equal contributory position, self-confidence is a trait that is gradually acquired. The traditional classroom environment brings with it certain dynamics which challenge self-confidence and thus makes the acquisition of self-assurance unsafe and risky. A genuine community of inquiry, operating under Lipman's criteria, can reduce but not eliminate this risk. Gender divisions also arise within a traditional setting. Females are less likely to question a male's position or make original contributions themselves. For whatever reasons, social or environmental, women students are far less participatory in an oral community of inquiry than males.

These classroom dynamics issues, however, seem to evaporate in a web-based course. The anonymity of Internet instruction brings a type of liberation. Students are not intimidated by the six foot seven inch football player's presence, as they are unaware of any such physical features. The soft-spoken 90-pound petite female student is able to present arguments with forceful eloquence. Remarkably, in a webcourse gender barriers disappear. Student participation is far more uniform. In a web-based community of inquiry, the dissenting idea is heard and evaluated attentively.

CONCLUSION

In this paper we have assumed that the goal of education is to produce excellence in thinking. We have further assumed that excellence in thinking is best achieved by implementing the community of inquiry instructional model. We have explored whether web-based instruction, by itself, can provide the necessary conditions for the development of a community of inquiry. Our conclusion is that web-based instruction, while it cannot totally replace the experience of the traditional classroom, can provide an arena in which students can hone base-skills that are requisite for the full participation in a reflective community of inquiry. To put it another way, we conclude that a student has a superior educational experience when the reflective community of inquiry is developed using both the traditional classroom setting and web-based instruction in tandem.

As we have discussed, the community of inquiry instructional model, whether used in a traditional classroom setting or in a web-based setting, helps to develop higher order thinking skills. However, web-based instruction cannot, by itself, provide the dynamic needed to construct a fully functioning community of inquiry. By its very nature, web-based instruction cannot replicate the conditions of the traditional classroom in which students, through face-to-face contact develop the requisite skills for the development of an effective and creative dialogue: listening, oratory proficiency, and the ability to translate visual signals from fellow participants in the dialogue. Perhaps, as technology advances, we may be able to develop virtual reality-based classroom experiences in which a student in a remote location could insert herself into a classroom environment and engage in a virtual dialogue where these skills could be honed. But, that is in the future.

What we do find is that web-based instruction, as technology currently allows, can play a vital role in overcoming the shortcomings of the traditional classroom in the development of a community involved in dialogical inquiry.

Web-based instruction overcomes such shortcomings as the problems of verbal mediation, slow-thinker exclusion, the continuity of discourse and irrelevance issues, and intimidation in the classroom. Web-based instruction, then, can enhance the traditional classroom experience by providing students, who are intimidated by the classroom setting, a learning environment in which they can develop competencies in certain skills needed for higher order thinking without the pressures associated with the traditional classroom. As students gain facility in these generic skills, they will become more confident in the classroom. Ultimately then, we see the attempt to develop a reflective community of inquiry without the inclusion of web-based instruction, as producing a community of inquiry that will not live up to its true potential.

NOTES

1. Lipman, Matthew. *Thinking in Education,* Cambridge University Press, New York, NY 1994, p. 229.

2. Scruton, Roger. *An Intelligent Person's Guide to Philosophy*, Penguin, 1996, p. 68

3. Lipman, *Philosophy Goes to School, p.* 20.

4. Lipman, Thinking in Education, p. 264.

5. Ibid., p. 264

6. Ibid., p. 264

7. Lardner, A.T., «The Real Behavioral Demands of a Community of Inquiry,» *The Journal of Philosophy for Children, Vol. 10.,* No.4, p. 29.

8. Lipman, *Thinking in Education, pp.* 9-10.

9. Lipman, *Thinking In Education, p.* 13-14

10. Lipman, Sharp, Oscanyan, *Philosophy In The Classroom,* 2nd ed., Temple University Press, 1980, p. 82.

11. Ibid., p. 82.

12. Lipman, *Thinking In Education, p.* 14.

13. Ibid., p. 15. This is Lipman's characterization of Dewey's position.

14. Ibid., p. 15.

15. Ibid., p. 15.

16. Lipman *Thinking In Education, p.* 15-16.

17. Ibid., p. 16.

18. Ibid., p. 16.

19. Ibid., p. 16

20. Ibid., p. 16.

21. Ibid., p. 17.

22. Ibid., p. 17.

23. Lipman, *Thinking In Education, p.* 19.

24. Ibid., p. 20.

25. Ibid., p. 20

26. Sharp, «Building Classroom Communities of Inquiry,» Studies in Formative Spirituality, Vol. IV, No. 3, 1983, as cited by A.T. Lardner in «The Real Behavioral Demands of a Community of Inquiry, *Thinking: The Journal of Philosophy for Children, Vol. 10,* No. 4., p. 28.

27. Liptnan, Sharp, and Oscanyan, *Philosophy In The Classroom,* p.84.

28. Ibid., p. 84-85.

29. Austrian Center of Philosophy for Children. Statement can be found at www.gewi.kf inigraz.ac.at/acpc/english/wasist.httnl.

30. Liptnan, *Thinking In Education, p.* 14.

31. Ibid., pp. 24-25.

32. Andione, Richard «Philosophical Inquiry and the Internet,» *Thinking, Vol.* 13, Number 3, pp. 37-45, 1997.

33. Sharp, Ann Margaret «The Community of Inquiry: Education for Democracy,» *Thinking, Vol.* 9, Number 2, pp. 31-37, p. 31.

34. Ibid., p. 32

35. In *Lisa,* the characters' ongoing philosophical discourse minimizes classroom time constraint issues. When the members of a class are relatively coextensive with neighborhood groups, conversations may feasible continue with few problems. Today's schools, however are often larger and bring in students from further distances, such that this picture looks implausible. See Lipman, *Lisa,* Institute for the Advancement of Philosophy for Children, Montclair State College, Upper Montclair, NJ, 1983.

36. Sharp, Ann Margaret, «Building Classroom Communities of Inquiry,» *Studies in Formative Spirituality, Vol. IV,* Number 3, 1983.

37. Liptnan, Thinking in Education, p. 229.

38. Sharp, Ann Margaret «The Community of Inquiry: Education for Democracy,» *Thinking, Vol.* 9, Number 2, pp. 31-37.

39. Sofo, Frank «Revival of Reasoning in the Modern Age by Developing a Classroom Community of Inquiry within College Students,» *Thinking, Vol.* 6, Number 3, pp. 25-29, p. 27.

40. Sofo, Frank «Revival of Reasoning in the Modern Age by Developing a Classroom Community of Inquiry within College Students,» *Thinking, Vol. 6,* Number 3, pp. 25-29, p. 27.

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Back to current electronic table of contents