DISTANCE EDUCATION ENVIRONMENTS AND
THE CONCERN FOR COMMUNITY

by


A thesis submitted to the School of Graduate
Studies in partial fulfilment of the
requirements for the degree of
Master of Education

Faculty of Education
Memorial University of Newfoundland
May 1999

St. John's
Newfoundland
ABSTRACT

The purpose of this thesis is to create a case for the concern that aspects of community important to education are missing from or not realisable in distance education environments. First, I establish the existence of such a concern and outline the case that will be made for it. Community is defined. Then, I begin making the case for communities as being important to education, particularly, communities of discourse. Communities are important to education, because, in short, communities of discourse are the ends and means of education. I illustrate a variety of these ends and means through descriptions of three educational discourse communities. I then discuss distance education environments in terms of their effects on the expression of and need for educational discourse. Distance education environments that affect educational discourse affect educational discourse communities, because the form that discourse takes is constitutive of discourse communities. Finally, I discuss the hypothesised effects of distance education environments on educational discourse, and discuss what, if any, of these hypothesised effects should matter to educators. I end with a brief analysis of the philosophical and practical ramifications of this discussion and some suggestions for further study.
ACKNOWLEDGEMENTS

My thesis is the by-product of a lot of people's care, attention, and help. Dr. Stephen P. Norris helped in more ways than I care to admit. I thank him for being the person who finally taught me how to think and write. But my thesis isn't only the product of an academic relationship, it is also the product of many wonderful personal relationships. Bill Tracey, Katherine Dundas, Treena Parsons, and Wendy McIsaac made my day-to-day enjoyable. And if they could see my tears right now, would probably smile because they all know they meant so much to me. I have to thank my parents (all sets – Dad and Charlene, Mom and Frank, and Mom and Dad Stone) for long-distance support. And, finally, Derrick Stone . . . 'nuff said.

This thesis is dedicated to my grandmother, Muriel Douglas Gram (1910-1998)
TABLE OF CONTENTS

ABSTRACT ............................................................................................................. ii
ACKNOWLEDGEMENTS ..................................................................................... iii
CHAPTER

1 INTRODUCTION ............................................................................................... 1

2 WHAT IS COMMUNITY? .................................................................................... 8
   TRADITION ........................................................................................................ 8
   SOCIAL STRUCTURE ......................................................................................... 10
   TEMPORAL AND SPATIAL STRUCTURE ........................................................ 15
   SUMMARY ........................................................................................................ 17

3 EDUCATIONAL RELEVANCE OF COMMUNITY ........................................... 18
   DISCOURSE COMMUNITIES AS AN END AND MEANS OF EDUCATION ........ 18
   EXAMPLES OF EDUCATIONAL DISCOURSE .................................................... 24
      VIRTUOUS DISCOURSE ............................................................................. 24
      RATIONAL DISCOURSE ......................................................................... 27
      EMANCIPATORY DISCOURSE ..................................................................... 33
   EDUCATIONAL DISCOURSE COMMUNITIES .................................................. 39
      TRADITION ................................................................................................. 39
      SOCIAL STRUCTURE .................................................................................. 44
      TEMPORAL AND SPATIAL STRUCTURE ..................................................... 52
      SUMMARY .................................................................................................. 62

4 DISTANCE EDUCATION ENVIRONMENTS AND EDUCATIONAL DISCOURSE ... 64
Chapter One: Introduction

The purpose of this thesis is to create a case for the concern that aspects of community important to education are missing from or unrealisable in distance education environments. This introductory chapter will establish the existence of such a concern and the requirements for its justification, and will outline the case that will be made for it.

In many editions of Memorial University's student newspapers, there is at least one article on technology and education (Gray, 1997; Luff, 1996; Muzychka & Frampton, 1997; Tipple, 1997). These articles, and many others, describe an undeniable trend in education toward distance delivery, and its attendant influence on accessibility to learning, decentralisation of teaching, and increasing learner responsibility. Many students, educators, and politicians view enthusiastically distance delivery as "a way of reforming institutions" (Johnson, 1996, p. 14), and of developing infrastructures that will enable schools to take advantage of the technological environment.

However, with this plethora of endorsement comes at least as much voiced concern that something of educational value is missing in these distance education environments that exploit computer technology as a way of linking teachers and students. The concerns range from scepticism over the ability of distance education environments to realise the purpose and objectives of education, to questions of the educational role of technology and our relationship to reality, each other, and to community.

Educators have voiced concern about the ability of distance education
environments to realise the purpose and objectives of education. Blumenstyk (1996) believes that unmediated “shared human spaces . . . are essential . . . and cannot be compromised . . . without rendering the education unacceptable” (p. A20). Ogden claims simply that “technology and teaching do not go together” (Lougheed, 1996, p. 40). And, Brand (1995) writes of “the wise use of technology” and the virtual university, and argues that

the learning that happens in the course of a college education goes beyond classroom knowledge to confer qualities and attitudes that are best acquired in a climate of shared enterprise. Campus-based higher education, as compared to distance learning, offers a rich matrix from which the student can gain broad outlooks, well-formulated life goals, an appreciation for the arts, and a recognition that education is a lifelong process. (p. 41)

Educators have also voiced concern about the role of technology and our relationship to reality. McKibben reflects on the difference between the virtual reality of the technical world and touching the real world. He claims that we are living in an age of missing information because “the bulk of human experience is now secondary and indirect and pre-packaged through the media” (Canadian Broadcasting Corporation [CBC], 1995, p. 7). Substituting educational technology for the teacher concerns Richard Soberman, professor of civil engineering at University of Toronto, who observes that often the computer affects his students’ judgements: “with the computer, you lose a certain amount of feel for the magnitude of something” (Gooderham, 1997, p. A8). John Turtle, an
adjunct professor at Atkinson College, questions whether the virtual classroom will ever replace the traditional classroom, because, among other things, “there is no substitute for an inspired teacher [in reality], who can bring the course material to life” (Bourette. 1996. p. D7).

Another concern expressed by educators is about the role of technology in our relationships with each other. Postman asserts that, among other things, the classroom is intended to connect the individual to others, but that “at present, most scenarios describing the uses of computers have children solving problems alone ... they do not need the presence of other children. The presence of others may, indeed, be an annoyance” (Postman, 1995, p. 45). Johnson (1996) reports that some argue “that attending university and interacting with students and professors in a classroom were experiences that held their own learning potential and could not be replaced by online course offerings” (p. 15).

Prendergast (1988) believes that material technology cannot be separated from social technology and calls for “not simply powerful and elegant technology, but appropriate technology ... [that] takes into account the full spectrum of human needs, particularly the higher needs upon whose satisfaction human happiness ultimately depends” (p. 164). Prendergast’s (1988) higher human needs include “the need for belongingness and affection, the need for respect and esteem and, finally, the need for self-actualization” (p. 163). Stahlman dismisses outright technology as a substitute for social relationships: “We are by nature social animals ... to imagine that you could replace a complex web of social relationships ... with clicking buttons on a television screen is lunatic” (CBC, 1995, p. 3).
Concerns of educators over the role of technology in building our relationships to reality and to each other have provoked further concerns over the role of technology in fostering community. Postman (1995) writes, "you cannot have a democratic — indeed, civilized — community life unless people have learned how to participate in a disciplined way as part of a group" (p. 45). Prendergast (1988) reflects on "the myth of the machine" and its detrimental effects on community. He likens scientists and technologists to the Pharaoh priesthood: "the priesthood now consists of scientists and technologists . . . the special knowledge is science and technology . . . and the inhuman purpose is unlimited material power and productivity . . . in both cases the authentic human good of the community is slighted;" (Prendergast, 1988, p. 163)

The above concerns for community have not gone unheard. Gooderham (1997) describes a new project, The Network for the Evaluation of Education and Training Technologies, aimed to assess whether instructional technologies are conducive to learning. The project mandate reflects the concern for community: at the top of the list of "examples of bad technologies" are those that "destroy community and collaborative learning" (Gooderham, 1997, p. A8). The focus on the relationship in education between community and technology in this new research project, and the views noted above indicate an existing concern that there is a risk that aspects of community important to education are missing from or not realisable in distance education environments.

Justification for this concern requires establishing two points: first, that possessing some aspects of community is intrinsically a desirable educational outcome, or that
possessing some aspects of community is important for the realisation of other intrinsically desirable educational goals; and second, that in either case, distance education environments are unable to realise the needed aspects of community.

Regarding claim one, what reasons do we have for accepting that community is a desirable educational goal or is important for the realisation of other desirable educational goals? Since the promotion of community would affect our educational practices, it is crucially important that there be good reasons for accepting community as a desirable educational goal. These reasons must be sought out and assessed.

Regarding claim two, that distance education environments are unable to realise important aspects of community, evidence and argument must be sought and assessed. It must be demonstrated that there is a risk that distance education environments are indeed unable to realise these aspects of community. It is necessary to find what reasons, if any, we have for expecting that they do not, and in what ways distance education environments can be shown to fall short of meeting this educational outcome of community.

Such an exploration of distance education environments and their relation to community is important, because its findings could affect directions taken in education. Distance education environments unable to realise the desirable goal of community might be abandoned or supplemented by education environments that could, and distance education environments able to realise this goal of community might be sought out and studied for their effects on other desirable educational goals.

To create a case for the concern that aspects of community important to education
are missing or unrealisable in distance education environments, the construct "community" needs to be defined. Chapter Two answers the question: "What is community?". The answer is outlined in three propositions:

1. Communities have traditions that provide a basis for individual identity;

2. Communities have a social structure that: (a) is derived from agreement; (b) is influenced by the kind and quality of bonds or attachments; and, (c) provides a basis for individual identity; and,

3. Communities have a temporal and spatial structure that influence the kind and quality of social structures that exist in a community.

Chapter Three is guided by the claim that community is an important educational outcome, or is related to important educational outcomes. In short, community is important to education because community, specifically discourse community, is an end and the means of education. Communities of discourse are ends of education, because a goal of education is the initiation of students into communities of discourse that enshrine our traditions. Communities of discourse are the means of education because education is conducted in and made possible by communities of discourse. Three examples of educational discourse are described to illustrate a variety of ends and means that educational discourse can display, and the varieties of communities that ensue.

The fourth chapter is guided by the claim that distance education environments are unable to realise community. Here, I discuss how distance education environments affect the expression of and the need for educational discourse. I consider the effects of distance education environments on the specific requirements and abilities necessary to engage in
educational discourse. Distance education environments that affect educational discourse affect educational discourse communities, because the form that discourse takes is constitutive of discourse communities.

In the fifth and final chapter, I discuss the effects of distance education environments on educational discourse, and discuss what, if any, of these effects should matter to educators. I end with a brief analysis of the philosophical and practical ramifications of this discussion and some suggestions for further study.
Chapter Two: What is Community?

This chapter answers the question, "What is community?" The answer is outlined in three parts. Community is characterised by:

1. Tradition - Communities have traditions that provide a basis for individual identity;

2. Social Structure - Communities have a social structure that: (a) is derived from agreement, (b) is influenced by bonds of kinship and affection, and (c) provides a basis for individual identity; and

3. Temporal and Spatial Structure - Communities have a temporal and spatial structure that influence the kind and quality of social structures that exist in a community.

Tradition

1. Communities have traditions that provide a basis for individual identity.

Tradition is the history of thoughts, feelings and practices of a group of individuals as exemplified through such artefacts as story, song, dance, text, and custom. Tradition is passed on as narratives of community existence of which the individual is a part. These narratives are adopted by individuals as part of their own identities. Some individuals do not reflect critically on tradition and continue to adopt narratives of community existence as first interpreted by them as a basis for identity. Others do reflect critically on tradition and come to accept, redefine, or reject it, using it as a catalyst or basis for a new or changed identity.

A person who does not reflect critically on tradition accepts tradition intact and on
its face as a basis for individual identity. For example, an adult raised as an infant and child in a strong religious tradition may not reflect critically on the tradition as a guide for being and doing. When questioned, a rote answer, such as, "The scripture says it is so." reveals an uncritical faith. Rote answers, thoughts, feelings, practices, and beliefs mark an uncritical acceptance of a tradition as a basis for individual identity. The thoughts, feelings, practices, and beliefs of those gone before are adopted uncritically as the individual's own, and constitute the individual's identity. For the uncritical person, looking to tradition answers not only the question, "Where did I come from?", but also the questions, "Who am I now?" and "What am I to be?".

A person who does reflect critically on tradition, comes to accept, redefine, or reject it as a basis for individual identity. Even if tradition is redefined or rejected, it still provides a basis for identity because it is the object of redefinition or rejection, and the point of reference from which the individual creates her own identity. Consider an example whereby a group rejected and then redefined their tradition as a basis for identity. In 1949, Inuit Elders in Northern Labrador voted to reject the traditional Inuit language as the language of instruction and to replace it with English, believing a tradition in English language and culture would provide a basis for an identity that would make them more capable individuals in modern society (Borlase, 1993). During the next three decades, as Inuktitut slowly disappeared, concern was expressed over English language and culture replacing traditional Inuit language and values. This concern was addressed at the Labrador Inuit Education Conference (Labrador Inuit Association [LIA], 1977), where
the tradition in education over the previous 28 years was redefined to include both English and Inuktitut. Inuktitut was reintroduced into the classroom in order to, among other things, promote, develop, and entrench a strong sense of Inuit culture, values, skills, and identity (LIA, 1977). This example illustrates a community's critical reflection on their traditions in education, and their resulting rejection and then redefinition of those traditions in order to create a basis for identity.

Social Structure

Social structure is the nexus of active relationships that constitute a community. Relationships can exist between individuals, groups, organisations, and classes of people.

2. (a) Communities have a social structure that is derived from agreement.

The network of relationships in a community is derived from agreement on values and beliefs that guide or organise the social structure of the community. Values and beliefs include those related to politics, economics, law, social practices, and morality. Consider the social structure of a community or society based on a capitalist economic system. Weber (1930) believed that the values and beliefs of the Protestant religion that encouraged thrift and the saving or reinvestment of profits facilitated the growth of the capitalist system in the West. Weber believed that ideas affected economics. The ideas, the values and beliefs, underlying the Protestant religion guided activities, attitudes, and behaviour that have fostered individualism through private ownership and promoted competition on the basis of individuals' right to seek their own economic self-interest (Jackson & Jackson, 1997, p. 202). In effect, agreement on certain values and beliefs have
guided the network of relationships or social structure of our capitalist society. Insofar as agreement on values and beliefs guide the activities, attitudes, and behaviour of individuals, groups, organisations, and classes of people, agreement on values and beliefs guide or organise the social structure of a community.

Recognise that beyond the objects of agreement, values and beliefs, the manifestation of agreement also produces the social structure of a community. Because agreement corresponds to level of participation and to the overall strength of a community. Agreement is a generic term that refers to three sorts of arrangements between people. The first sort of arrangement involves an agent in passive unidirectional agreement; for example, one who acquiesces to another. The second involves an agent in active unidirectional agreement; as in one who actively consents to, conforms to, or obeys others. The third involves two agents in active bi-directional agreement, such as the sort of agreement reached through negotiation, debate or discussion. Any member in the community may participate in any of the above arrangements depending on the circumstances. Consider the social structure of a political community and imagine it is voting day. Those who chose not to vote are in passive unidirectional agreement. They acquiesce to the voting others, and, because they choose not to participate, they are at best weakly associated with the political community. Those who voted participated in active unidirectional agreement: that is, they participated by voting but consent to, conform to, and obey the voting majority. They are members of the political community, though their association to it also is weak. The newly elected representatives comprise the
strong political community because they engage in active bi-directional agreement in
negotiation, debate, and discussion that will guide and organise the interaction of
individuals, groups, organisations, and classes of people. The particular arrangement
between individuals in the political community corresponds to the individual's level of
participation or activity and to the overall intensity or strength of the particular
community's social structure.

Note that a strong community does not necessarily mean one free of disagreement
and change. In the moral community, consensus or agreement is an "outcome of ongoing
dialectical debate" (Vokey, 1992, p. 336) between opposing views. In the social
community, agreement on "social practices are routinely altered in the light of ongoing
discoveries which feed into them" (Giddens, 1990, p. 38). The social structure of a
community is a dynamic process that is continually challenged in light of new and ongoing
discoveries, and debated and renegotiated in attempts to improve how we interact and live
together.

2. (b) Communities have social structure that is influenced by the kind and quality
of bonds or attachments.

The social structure of community is influenced by bonds of kinship and affection,
the nature and depth of which are in part determined by the degree to which an individual
cares, is concerned, and is connected -- what Noddings (1992) coined as the Three C's.
The Three C's of care, concern, and connection influence social structure because the
bonds or attachments that arise from them influence individual and group activities.
attitudes, and behaviours constitutive of social structure.

There are at least four kinds of attachments or bonds constitutive of social structure: “ties to individuals; commitment to general lines of action or goals; involvement and participation in certain types of activities; and belief in the moral validity of social rules” (Raywid, 1988). The strength of these bonds is determined by the degree to which an individual cares, is concerned, and is connected. These bonds, in turn, influence individuals' activities, attitudes, and behaviour constitutive of social structure. Consider the social structure of a group of workers. Physical proximity and frequency of interaction at work lead to friendship between pairs of people and the formation of groups among larger numbers (Argyle, 1972). This friendship affects the group's activities, attitudes, and behaviour in the workplace.

Cohesiveness has certain definite effects on the social behaviour and standard of work of group members. Members of cohesive groups interact with one another more. they interact more smoothly, they enjoy being in the group, and feel less tension at work. They cooperate smoothly over the group's work. they help each other more. and there are reciprocated arrangements for helping.

(Argyle, 1972, p. 119)

The degree of care, concern, and connection an individual has toward her co-workers affects bonds to the workplace and influences work activities, attitudes, and behaviour. Insofar as bonds influence activities, attitudes and behaviours, and activities, attitudes, and behaviours are constitutive of social structure, bonds influence the social structure of
community.

Note that strong bonds are not necessarily constitutive of a more desirable community. How and why one is bonded or attached matters. How and why one cares, is concerned, and is connected matters because community has a dark side (Noddings, 1996). Care, concern, and connection to a xenophobic degree leads to community activities, attitudes, and behaviours that are characterised by parochialism, conformity, assimilation, distrust (or hatred) of outsiders, and coercion. “Communities at all levels can exert peer pressure for good or evil ends” (Noddings, 1996, p. 254). To use a subgroup or even a collective identity as the centre of education (in curriculum, pedagogy, and so on) is to risk a community of continual coercion that often in the name of equality presses for uniformity, common aspirations, a white-collar identity, and the suppression of the needs and differences of others (Noddings, 1996, p. 267).

2. (c) Communities have social structure that provides a basis for individual identity.

The social structure of a community provides a basis for individual identity because identity formation depends to a large degree on relationship with others. Forming one's identity is largely dependent upon the action of others as well as upon one's own (Simpson & Jackson, 1997). The formation involves appealing to others as sources of self-fulfilment. For example, one becomes an individual partly through the formation of beliefs, and beliefs are formulated through comparison and contrast to the ideas of others. As well, others may provide evaluative feedback about oneself and one's action, attitude, and
behaviour. Evaluative feedback contributes to identity formation because it constitutes a meta-narrative on the process and results of one's identity formation providing a basis of identity assessment. Thus, identity formation requires the searching out of others with whom to compare and contrast ideas and is facilitated by the evaluative feedback provided by others. In short, identity formation is realised by moving out into the world and engaging others. The engagement is made possible by the networks of individuals that constitute the social structure of a community. Insofar as identity formation requires other individuals, and social structure is a network of individuals, social structure provides a basis for identity formation.

Note that each appeal to another as a source of self-fulfilment becomes a cohesive force uniting human beings through bonds of interdependence (Simpson & Jackson, 1997). In the same way as one appeals to others, one is a source for others’ appeals in their attempts at identity formation.

Temporal and Spatial Structure

3) Communities have a temporal and spatial structure that influence the kind and quality of social structures that exist in a community.

Things exist in temporal and spatial relationship. Space, for example, exists as "a relation between objects (such as planets, cities, or people) which do have substance" (Duncan, 1989, p. 230). These objects cannot be understood in isolation from the larger temporal continuum. All objects possess a history and generate a history. The temporal and spatial structure of a community is constitutive of the temporal and spatial relations
between social objects. Although temporal and spatial relations are created by social objects, they cannot be reduced to them, because, having been constituted by objects, temporal and spatial relations may thereafter affect how these objects relate. It is not simply that the temporal and spatial are socially constructed, but that the social is temporally and spatially constructed. While time and space only have affect insofar as social objects are related to one another, how such objects relate depends on the very relationship in time-space established with other objects. Time and space are not simply a reflection of the social, but are constitutive elements of the social, because social practices are temporally and spatially patterned. These patterns substantially affect the very social practices that constitute them. Consider, historically, the social structure of an economic community. Before the invention of money, economic transactions were conducted in immediate time and space where immediate exchange of products was the practice -- for example, one cow was exchanged for eight chickens, there and then. Immediate time and space constructed an immediacy of social practices in each economic exchange. “Every economic engagement was also a personal one” (Giddens, 1990, p.24), a personal and social practice exchanging product for product. The invention of money enabled the enactment of transactions between agents widely separated in time and space. Separation in time and space separated the personal and social practice from the economic exchange. The invention of money disconnected the personal from the economic because money came to represent the personal (Giddens, 1990) -- money represented one’s cow or chickens fed and tended by one’s own hand. The personal and social in the immediate
exchange of products is now virtually obsolete because those engaged are more often than not separated in time and space. Insofar as temporal and spatial structure affect interaction between individuals, temporal and spatial structure influence the social structure of community.

Summary

I have defined community. Community is characterised by:

1. Tradition - Communities have traditions that provide a basis for individual identity;

2. Social Structure - Communities have a social structure that: (a) is derived from agreement, (b) is influenced by the kind and quality of bonds or attachments, and (c) provides a basis for individual identity; and,

3. Temporal and Spatial Structure - Communities have a temporal and spatial structure that influence the kind and quality of social structures that exist in a community.

Having defined the construct community, I now begin creating a case for the concern that aspects of community important to education are missing or not realisable in distance education environments. The following chapter is guided by the claim that community is an important educational goal or is related to important educational goals.
Chapter Three: Educational Relevance of Community

Community is relevant to education because community is both an end and the means of education. Education centrally involves initiation into our traditions (Peters, 1965). Community is an end of education, because initiation into our traditions is initiation into communities of discourse that enshrine those traditions. The initiation of students into communities of discourse that enshrine our traditions is a goal of education, because initiation into these traditions contributes to the development of the individual and to the reproduction of the social group. Community is the means of education, because education is conducted in communities and made possible by communities of discourse.

In the next section, I shall discuss community as an end of education by showing how traditions are forms of discourse communities, and how discourse communities contribute to development of the individual and reproduction of the social group. I also shall discuss community as the means of education by showing how education is conducted in and made possible by communities of discourse. In subsequent sections of the chapter, I shall describe three examples of educational discourse and explicate how the characteristics of community are instanced in each.

Discourse Communities as an End and Means of Education

Education can be construed partly as an initiation into various traditions defined by forms of discourse. The inherited traditions include science, history, mathematics, music, and the arts. All of these traditions are forms of discourse, because discourse is
constitutive of the knowledge in them (Bizzell, 1992; Harré, 1986). The same point is made by Postman (1988): “All subjects are forms of discourse . . . and therefore almost all education is language education. Knowledge of a subject mostly means knowledge of the language of that subject” (p. 23). This point should not be construed to mean that education is simply the teaching of terms or of vocabulary. Only in part is the “function of education to provide repeated experiences of terms in particular ways in particular subjects to enable common usage in meaningful discourse” (Brown, 1995, p. 8). To conceive of initiation into forms of discourse as only the rote learning of terms is to hold a narrow and minimal notion of the task because forms of discourse are constitutive of more than words. Initiation into forms of discourse constitutes initiation into complex discourse communities that encompass roles, styles, conventions and standards, as well as relationships and understandings. All of these are objects of education.

Consider the discourse community that enshrines the tradition of science. Relationship is revealed in scientific discourse in every claim to knowledge. Expressed by a simple discursive phrase, “I know that . . .,” a claim to knowledge implies relationship to others. “I know that . . .” means in fact, “Trust me that . . .”, “You can believe me that . . .”, or “I speak of that knowledge upon which you can rely, form beliefs, place trust.” (Harré, 1986). Claims to knowledge are affirmations to others of personal trustworthiness. Personal trustworthiness is fundamental to the discourse community of science. In fact, the scientific discourse community could not be possible without trusting relationships. Hardwig (1985) refers to an article from the Physical Review Letters.
volume 51, in which appeared an experimental report with 99 authors! As cited in Norris (1995):

... one of the authors of the article explained to Hardwig that no single author was privy to all the information and skill required to do the experiment, and that it was impossible for one scientist to perform the experiment, given that the author could account readily for 210 person years of work to complete it. (p. 207)

The knowledge gained as exemplified in the scientific paper was possible only through teamwork and only through the acceptance by scientists of the testimony of other scientists. In the science classroom, the teacher is responsible for initiating students into the discourse community of science including relationships characterised by personal trustworthiness.

Consider standards and conventions and the scientific discourse community. It is understood in the discourse community of science that the testimonies of other scientists that one trusts and accepts are founded on established standards and conventions. “The trust that scientists claim from laypersons entails a commitment to intellectual honesty, to having made attempts to substantiate claims in the way that claims are substantiated in the community” (Harre, 1986, p. 90). The discourse of the community is thus governed by these standards and conventions. Trust in scientists is founded in the scientists’ adherence in their scientific discourse to the established standards and conventions of the community. Sometimes, as is the case with the layperson, he or she may not even know the standards of a particular discourse community, but he or she knows such standards exist. In the
science classroom, teachers are responsible for initiating students into these standards and conventions and into how they govern scientific discourse. Thus, initiation into discourse involves much more than the acquisition of terms and vocabulary.

Initiation of students into communities of discourse, in turn, contributes to the development of the individual, and to reproduction of the social group. Peters (1965) writes, “a child is born with an awareness not as yet differentiated into beliefs, wants, and feelings. All such specific modes of consciousness . . . develop later . . . a product of initiation into public traditions enshrined in a public language” (Peters, 1965, p. 102). As discussed, traditions enshrined in a public language are forms of discourse. Hence, from Peters’ account it follows that the development of the individual is the product of initiation into discourse communities.

Initiating the individual into communities of discourse also contributes to reproducing the social group, because the community roles, styles, conventions and standards, and relationships and understandings are the means by which social groups reproduce themselves. Education entails availing the young of certain dispositions, values, and knowledge possessed by adult members of the group into which they are born (Dewey, 1916). Insofar as these dispositions, values, and knowledge are enshrined in discourse communities, then initiating students into communities of discourse contributes to reproduction of the social group.

In addition to being an end, community is the means of education, because education is conducted in and made possible by communities of discourse. “The main
work of teaching is conducted by means of verbal communication” (Hirsch. 1987. p. 146).
The “immense aggregate of intellectual artifacts” of society is passed from one generation
to another “by a process of communication which flows from adults to young people”
(Polanyi, 1958. p. 207). But teaching is not simply a one-way flow of words from teacher
to student.

The teacher does, of course, employ language, . . . but its primary function is not
to impress his statements on the student’s mind for later production . . . . learning
[is acquired] not merely by external suggestion but through a personal engagement
with reality. (Scheffler, 1971, p. 138)

Engaging with reality through language or forms of discourse constitutes engaging in
discourse communities, engaging in the roles, styles, conventions and standards, and
relationships and understandings of the discourse community. All of these are the means of
education.

Relationship in the discourse community, for example, is a means of education
because teaching and learning must involve others. Teaching and learning involves
the negotiation, construction, and reconstruction of meanings in the minds of the
participants . . . . There are no clearly objective facts that proceed uninterpreted . . .
. . . . [Teaching and learning] is an engagement of minds considering the same issues.
developing common languages, challenging each other’s assumptions, and
achieving understanding. (Doheny-Farina, 1996. p. 112)

In the classroom, the engaging of minds constitutive of teaching and learning is made
possible by means of discursive relationship, because it is through language that beliefs, thoughts, and feelings are shared.

Standards and conventions of the discourse community are also a means to education because learning itself requires adherence to the rules and procedures of discourse. The student must

wean herself from the merely autistic expression of her own feelings (or the equally autistic fear of saying anything at all), and take part in a kind of public game with rules and procedures of its own. She has to submit herself to criticism, not mind much about making a fool of herself, attend to the meanings of the words she uses, exercise tact and tolerance towards others, not become too angry, not take criticism personally, stick to the point, face facts, keep to the rules of logic, and so forth. (Wilson, 1993, p. 58)

It is only by adhering to these rules and procedures that the student may be open to assess, and alter her own thoughts, feelings, and beliefs on the basis of reasonable alternatives posed by the teacher and other students. This process is constitutive of learning. In the classroom, learning is made possible by adhering to the rules and procedures of discourse.

To summarise to this point, community is relevant to education because community is an end and the means of education. Community is an end, because initiation of students into communities of discourse that enshrine our traditions is a goal of education, and because initiation into these communities of discourse contributes to the
development of the individual, and to the reproduction of the social group. Community is the means of education because education is conducted in and made possible by communities of discourse.

Examples of Educational Discourse

Turning to literature in the philosophy of education, three proposed examples of educational discourse are described below: virtuous discourse, rational discourse, and emancipatory discourse. The point is to illustrate a variety of ends and means that educational discourse can display, and the varieties of communities that ensue.

Virtuous discourse. Virtuous discourse is that sort of discourse that enables open and equitable communication. Virtuous discourse is guided by communicative virtues that are constituted by “a cluster of intellectual and affective dispositions that together promote open, inclusive, and undistorted communication” (Rice & Burbules, 1993, p. 37). Below, I shall address two questions: What are the characteristics of virtuous discourse? What educational value does virtuous discourse have?

Virtuous discourse is characterised by communicative virtues that include: patience, tolerance for alternative points of view, respect for differences, willingness and ability to listen thoughtfully and attentively, openness to giving and receiving criticism, inclination to admit that one may be mistaken, ability and willingness to interpret or translate one’s own concerns in a way that makes them comprehensible to others, self-imposition of restraint in order that others may speak, and the disposition to express one’s self honestly and sincerely (Rice & Burbules, 1993; Burbules & Rice, 1993). The
communicative virtues are dispositions that enable communication, especially between those who differ in linguistic style, experience, or belief. Consider patience, tolerance, and listening: "if one positively values patience, . . . one is more likely to persist when conversation becomes difficult. One who is tolerant and willing to listen thoughtfully and carefully will be better prepared to understand those whose speech or opinions differ markedly from one’s own" (Rice & Burbules, 1993, p. 36). Lacking these communicative virtues, one is likely to resort to whatever tactics available to promote one’s own perspective over others’, or to refuse conversational engagement altogether (Rice & Burbules, 1993).

Expression of the communicative virtues is situational. Communicative virtues must be expressed in the right combination, at the right time, and in the right way:

[The communicative] virtues require close attention to the particulars of the communicative situation at hand. and how any of them are expressed will vary according to what these situations require. Listening, for example, although generally regarded as a virtue in situations where one’s partner is struggling with ideas that he or she wants to articulate, might not be so regarded in situations where urgently needed directions or information are asked for, or where silence signals acquiescence to views one does not actually hold. Similarly, tolerance and patience may be virtues when practised by a teacher striving to understand and appreciate a student’s perspective, but not when invoked to protect racist or sexist speech that intimidates, harms or silences others. (Burbules & Rice, 1993a, p. 20)
Possession of the communicative virtues and using them in the right combination, at the right time, and in the right way may not be sufficient to overcome the numerous obstacles that block and distort communication. However, if one lacks the communicative virtues or uses them inappropriately, one will be excluded from and may exclude others from numerous communicative contexts (Rice & Burbules, 1993, p. 37).

What educational value does virtuous discourse have? There are at least two justifications for virtuous discourse: (a) it demonstrates respect for persons, and (b) it assists in attaining valuable goods. First, engaging in virtuous discourse satisfies the moral obligation to show respect for students as persons. Students are deserving of respect for their unique feelings, thoughts, and beliefs. Virtuous discourse contributes to respect for students as persons because in a classroom in which both teacher and students are engaged in virtuous discourse, the student's right to have and express her unique feelings, thoughts, and beliefs is respected. Virtuous discourse "can sustain differences within a broader compact of toleration and respect" (Burbules & Rice, 1993a, p. 10). Insofar as respect for students as persons is a moral obligation, and virtuous discourse contributes to respect for students' unique feelings, thoughts, and beliefs, virtuous discourse has educational value.

Second, virtuous discourse assists in attaining valuable goods. Such goods include instrumental goods, social goods, and epistemic goods. Attainment of such goods involves appealing to others as sources. For example, attainment of epistemic goods often involves appeal to others because the others hold the knowledge we desire. We appeal to others
that they might share their knowledge and in so doing we might attain it. “Other things being equal, relations that are expressive of [communicative] virtues will be more supportive of the numerous and varied goods we can achieve communicatively” (Rice & Burbules, 1993, p. 38). Students who are able to express communicative virtues such as the ability to interpret or translate their individual concerns in a way that makes them comprehensible, express with increased clarity their appeals to teacher and students for epistemic goods. Others who are patient and willing and able to listen attentively, are receptive and responsive to those making appeals and so are more amenable to sharing or giving those goods appealed for. Insofar as attainment of epistemic and other goods achievable communicatively involve expression of and response to appeals to others, and virtuous discourse facilitates the communicative expression of and response to appeals to others, virtuous discourse is educationally valuable.

**Rational discourse.** Rational discourse is that sort of discourse in which people are appropriately moved by reasons. Here, I shall address three questions: What characterises rational discourse? What is necessary to engage in rational discourse? What educational value does rational discourse have?

Rational discourse is characterised broadly as being reasonable, reflective, and focussed. Rational discourse is *reasonable* discourse because it is concerned with good reasons in reaching conclusions about what to believe and how to act. Rational discourse is *reflective* because it involves the self-conscious examination of the reasonableness of one’s own and others’ thoughts. The reflective nature of rational discourse is indicative of
the individual's conscious seeking and using of good reasons. Lastly, rational discourse is
\textit{focussed} because it is conducted for a purpose: deciding what to believe or do.

In order to engage in reasonable, reflective, and focussed discourse, one needs
both abilities and dispositions. "The abilities include those required to interact effectively
with other people, to judge the soundness of information and inferences drawn from
information, to produce credible information and inferences, and to maintain clarity" (Norris & Ennis, 1989, p. 8). Consider each of these abilities in turn. First, rational
discourse requires the ability to interact effectively with other people because rational
discourse takes place within a social and problem-solving context. Interacting effectively
requires one to employ communicative strategies and tactics to keep the discourse
focussed, to communicate coherently, and to receive communication from others
intelligibly. Second, rational discourse requires the ability to judge information and
inferences drawn from information. Making sound judgements is "to assess reasons and
their ability to warrant beliefs, claims and actions properly" (Siegel, 1988, p. 38). It
requires a grasp of field-specific criteria, and a general understanding of the nature of
reasons, warrant, and justification as these notions function across specific fields (Siegel,
1988, p. 37). A third ability required to engage in rational discourse is the ability to
produce credible information and inferences. This includes the ability to formulate
candidate hypotheses that might meet the evaluative criteria used to judge information and
inferences (Norris & Ennis, 1989, p. 9). Lastly, rational discourse requires the ability to
maintain clarity about which questions are being asked, what assumptions are being made.
what particular information means, and what decision is being reached.

Possession of the above abilities is not sufficient for engaging in rational discourse. Engaging in rational discourse also requires an appropriate disposition. Siegel (1988) calls this disposition, "a critical attitude or spirit". The critical attitude includes "certain attitudes, dispositions, habits of mind, and character traits" (Siegel, 1988, p. 39).

[A person] must not only be able to assess reasons properly, in accordance with the reason assessment component, she must be disposed to do so as well; that is, have a well-developed disposition to engage in reason assessment... [She] must have a willingness to conform judgment and action to principle, not simply an ability to so conform. One who has the critical attitude has a certain character as well as certain skills: a character which is inclined to seek, and to base judgment and action upon reasons, which rejects partiality and arbitrariness; which is committed to the objective evaluation of relevant evidence; and which values such aspects of critical thinking as intellectual honesty, justice to evidence, sympathetic and impartial consideration of interests, objectivity, and impartiality. (Siegel, 1988, p. 39)

The critical attitude demands not simply an ability to seek reasons, but a commitment to do so -- a deep commitment to and respect for reason. As such, a person with a critical attitude possesses rational passions:

- a love of truth and a contempt of lying, a concern for accuracy in observation and inference, and a corresponding repugnance of error in logic or fact... a revulsion
at distortion, disgust at evasion, admiration of theoretical achievement. respect for the considered arguments of others. (Scheffler, 1971, p. 144)

Similarly, such a person has:

- a passionate drive for clarity, accuracy, and fair-mindedness. a fervour for getting to the bottom of things . . . for listening sympathetically to opposing points of view, a compelling drive to seek out evidence, an intense aversion to contradiction. sloppy thinking, inconsistent application of standards. a devotion to truth as against self-interest. (Paul, 1984, p. 23)

A person with a critical attitude cares about reason and its use and point: she cares “about finding out how things are, about getting things right, about tracking down what is the case” (Peters, 1970, p. 151). In short, she who engages in rational discourse acts in certain ways, and, in addition, is a certain sort of person. Rational discourse requires both the rational abilities combined with the rational or critical disposition.

What educational value does rational discourse have? I offer four justifications for rational discourse which parallel Siegel’s work (1988) on critical thinking: (a) it shows respect for persons. (b) it fosters self-sufficiency and preparation for adulthood. (c) it aids with initiation into the rational traditions, and (d) it is a requirement for democratic living.

First, engaging in rational discourse contributes to respect for students as persons. This is a moral obligation. Teachers and others should respect students because students are persons and so are deserving of respect. The Kantian principle of respect for persons requires we treat others as ends and not means. Respect for students as persons includes
respect for students' rights to question, challenge, and seek reasons, explanations, and justification. Rational discourse contributes to respect for students as persons because, in a classroom in which both teacher and students are engaged in rational discourse, the student's right to question, challenge, and seek reasons, explanations, and justification is respected (and, in fact, encouraged). Insofar as respect for students as persons is a moral obligation, and rational discourse contributes to respect for students as persons, rational discourse has educational value.

Second, rational discourse helps students become self-sufficient and prepared for adulthood. At least in part, we educate to prepare children successfully to face adulthood by attempting to foster in them self-sufficiency in controlling their own lives. Self-sufficiency requires reasoning independently to conclusions about what to believe and decisions on what to do. Rational discourse helps students become self-sufficient and prepared for adulthood because educational activities organised around rational discourse encourage reasoning necessary for self-sufficiency. Encouraging rational discourse "encourages [children] to ask questions, to look for evidence, to seek and scrutinise alternatives, to be critical of their own ideas as well as those of others" (Scheffler, 1971, p 143). Insofar as education attempts to foster self-sufficiency and prepare children for adulthood, and rational discourse encourages in students reasoning necessary for self-sufficiency, rational discourse is educationally valuable.

Third, rational discourse is, in part, the object of students' initiation into the rational traditions. Education, on this view, amounts to the initiation of the student into
the central human traditions (Peters, 1965). Initiating students into these traditions --
science, literature, history, the arts, mathematics -- in part, consists of fostering an
appreciation in students of the particular tradition’s standards governing the appraisal of
reasons (McPeck, 1981). Standards governing the appraisal of reasons are enshrined in the
language of the tradition, particularly in the tradition’s rational discourse. Thus, rational
discourse is, in part, the object of initiation into rational traditions because rational
discourse is constitutive of that part of the rational tradition concerned with standards
governing the appraisal of reasons. Insofar as education involves the initiation of students
into rational traditions, and rational discourse is in part constitutive of the rational
traditions, rational discourse has educational value.

Lastly, rational discourse fosters in students requirements for democratic living.
Democracy, at least ideally, “aims so to structure the arrangements of society as to rest
them ultimately upon the freely given consent of its members. Such an aim requires the
institutionalization of reasoned procedures for the critical and public review of policy”
(Scheffler, 1971, p. 137). Rational discourse fosters in students reasoning necessary to
examine critically and to give consent on arrangements of society because rational
discourse encourages students “to judge intelligently the many issues facing society: to
challenge and seek reasons for proposed changes (and continuations) of policy; to assess
such reasons fairly and impartially; and so on” (Siegel, 1988, p. 60). Insofar as we are
committed to democracy, and rational discourse fosters in students the reasoning required
to be critical and consenting citizens of democratic living, rational discourse has
Emancipatory discourse is discourse that aims at eliminating oppressive social practices. I will address three questions: What characterises emancipatory discourse? What is necessary to engage in emancipatory discourse? What educational value does emancipatory discourse have?

Emancipatory discourse is discourse that "takes as a referent for action the elimination of those ideological and material conditions that promote various forms of subjugation, segregation, brutality, and marginalization, often expressed through social forms embodying racial, class, and sexist interests" (Giroux, 1987, p. 105). Its purpose is to demystify existing power relations and the current public dialogue which sanctifies them. This involves: identifying those issues which are prevented from becoming public because of existing power constellations; identifying those groups that have not had access to means of public expression and advocating their inclusion in the discourse of legitimacy; distinguishing between genuine agreement and pseudo-compromises based on the intractability of power relations; and saying what is in the public interest as opposed to the universalisation of what is only the interest of a particular group. (Benhabib, 1989, p. 154)

Emancipatory discourse is characterised by a partisanship toward the oppressed. In general, discourse is characterised by an inextricable relation between language and power (Freire, 1972). Discourse is capable of subordinating the world of human agency and struggle to the interests of dominant groups and of giving meaning to radical desires,
aspirations, dreams, and hopes. The rhetoric of extreme religions or cults are such examples of the power of language to subordinate individual desires and to give meaning to radical and sometimes bizarre understandings of the world. Discourse constitutes both “a terrain of domination and field of possibility” (Giroux, 1988, p. 65). Emancipatory discourse is characterised by its attempt to link “the product of meaning to the possibility for human agency, democratic community, and transformative social action” (Giroux, 1988, p. 68). Emancipatory discourse attempts to link language with its potential to move one toward democratic social action. Note, emancipatory discourse is not the equivalent of emancipation; rather, emancipatory discourse is the precondition for engaging in struggles around both relations of meaning and relations of power (Giroux, 1988).

There are five requirements to engage in emancipatory discourse: love, humility, faith, hope, and critical thinking (Freire, 1972). First, emancipatory discourse requires love for the world and for persons. Domination that emancipatory discourse tries to usurp reveals the pathology of love: sadism in the dominator and masochism in the dominated (Freire, 1972, p. 78). The dominator loves herself too much and engages in discourse that perpetuates her own agency and interests: the dominated loves herself too little and engages in discourse that belittles or silences her agency and interests and denies her access to and participation in a discourse free of power relations. Emancipatory discourse that aims at eliminating power relations requires a love for the world and persons that denies subordination of agency and interests.

Second, emancipatory discourse requires humility. Emancipatory discourse is not
possible if both or one of the parties lacks humility. One cannot engage in discourse that aims at eliminating power relations if one projects ignorance onto others, regards oneself as apart from others, regards discourse as an activity for an elite, or is closed to the contributions of others and afraid of being displaced.

Third, emancipatory discourse requires faith in persons.

‘Dialogical man [sic]’ believes in other men even before he meets them face to face. His faith, however, is not naive. The ‘dialogical man’ is critical and knows that although it is within the power of men to create and transform [through discourse], in a concrete situation of alienation men may be impaired in the use of that power. (Freire, 1972, p. 79).

Faith in persons includes faith in a person’s ability to engage in discourse itself and in a person’s ability to create and transform through discourse. Without faith in persons, one may be inclined to speak for the other in an effort to aid or dominate. Speaking for another silences the other’s voice and inevitably degenerates into a discourse of domination.

Fourth, emancipatory discourse requires hope that discourse can in fact lead to eliminating oppressive social practices. An unjust order that results in dehumanisation is a cause for hope (and not despair), because injustice leads to the incessant active pursuit of humanity (Freire, 1972, p. 80).

Lastly, emancipatory discourse requires critical thinking in discerning an indivisible solidarity between the world and persons and in perceiving reality as a process, or a
transformation, rather than as a static state (Freire, 1972, p. 81). Critical thinking is required in the assessment of oppressive social practices in the world and persons and in determining action to be taken that will transform realities of oppression into those that contribute to the humanisation of persons.

What educational value does emancipatory discourse have? There are at least four justifications for emancipatory discourse: (a) it contributes to reciprocity, (b) it fosters production of self-knowledge, (c) it shows respect for persons, and (d) it is a requirement for democratic living. First, engaging in emancipatory discourse contributes to reciprocity in the give and take between teacher and students, and student and student. Learning “comes from the give and take, from the exchange of experiences and ideas” (Dewey, 1946, p. 36). Emancipatory discourse fosters mutual exchange of experiences and ideas because in a classroom in which both students and teacher are engaged in emancipatory discourse, “authoritative discourse of impositions and recitation [is replaced] with a voice capable of speaking in one’s own terms, a voice capable of listening, retelling, and challenging the very grounds of knowledge and power” (Giroux, 1986, p. 55).

Emancipatory discourse fosters reciprocity in the mutual exchange of experiences and ideas by aiming to eliminate oppressive social practices that silence voices and deafen ears. Insofar as learning occurs from the exchange of experiences and ideas, and emancipatory discourse fosters reciprocity that contributes to a mutual exchange of experiences and ideas, emancipatory discourse has educational value.

Second, emancipatory discourse fosters in students the production of self-
knowledge. On this view, the essential learning task in education is "that learning and teaching are meant to bring about self-knowledge with knowledge of one's culture (and "the world" . . .)" (Fine, 1989, p. 162). The production of knowledge in general is a relational act, because "knowledge is produced in the process of interaction [between self and the world], between writer and reader at the moment of reading, and between teacher and learner at the moment of classroom engagement" (Lusted, 1986, p. 4). Emancipatory discourse fosters a critical attentiveness to the web of relations in which knowledge is produced (Giroux, 1988, p. 69), with the aim to foster relations free of oppression that may restrict or limit the process of interaction leading to self-knowledge. Insofar as education is intended to bring about self-knowledge, and emancipatory discourse aims at eliminating oppressive relations that may restrict or limit self-knowledge, emancipatory discourse has educational value.

Third, engaging in emancipatory discourse contributes to the moral obligation to show respect for students. Students are due respect because they are persons. Respect for students as persons includes respect for students' right to have equal opportunity to engage in discourse. Emancipatory discourse contributes to respect for students as persons, because, in a classroom in which both teacher and student are engaged in emancipatory discourse, the student's right to have equal opportunity to engage in discourse is respected. Students engaged in emancipatory discourse engage in the "ideal speech situation"... [where] each participant must have an equal chance to initiate and continue communication. Each must have an equal chance to make
assertions, recommendations, and explanations. All must have equal chances to express their wishes, desires, and feelings. And finally, within the situation of dialogue speakers must feel free to thematize those power relations which in ordinary contexts would constrain the wholly free articulation of opinions and positions. (Benhabib, 1989, p. 150)

Insofar as respect for students as persons is a moral obligation, and emancipatory discourse contributes to respect for persons by enabling equal opportunity to engage in discourse, emancipatory discourse has educational value.

Lastly, emancipatory discourse fosters in students requirements for democratic living. Democratic living necessitates in its members a tolerance of differences in individual feelings, thoughts, and beliefs. Democratic tolerance involves the “interrogation of interests that underlie differences . . . particularly with respect to how such interests shape human relations that are either emancipatory or repressive” (Giroux, 1987, p. 119).

Repressive interests embodied in oppressive relations and social practices are, of course, not compatible with democratic living. Emancipatory discourse that aims at eliminating oppressive social practices encourages in students the assessment, or interrogation, of interests that underlie differences. The assessment of interests underlying differences is required in order to determine which practices are oppressive and whether action is to be taken, and, if so, which action. Insofar as we are committed to democracy, and emancipatory discourse encourages in students the assessment of interests underlying differences and the elimination of social practices embodying those interests not
compatible with democratic living, emancipatory discourse has educational value.

**Educational Discourse Communities**

Each discourse examined creates a kind of community. because each discourse instantiates the characteristics of community. In each case, the form of the discourse influences the nature of the community created. In what follows, I shall explicate how each characteristic of community is instanced in virtuous, rational, and emancipatory discourse with reference to educational settings. Recall that the three characteristics of community are:

1. **Tradition** - Communities have traditions that provide a basis for individual identity;

2. **Social Structure** - Communities have a social structure that: (a) is derived from agreement; (b) is influenced by the kind and quality of bonds or attachments; and (c) provides a basis for individual identity; and;

3. **Temporal and Spatial Structure** - Communities have a temporal and spatial structure that influence the kind and quality of social structures that exist in a community.

**Tradition.** Tradition is the first characteristic of community that is instanced in virtuous, rational, and emancipatory discourses. In each case, the intellectual and practical pursuits of the discourse constitute a tradition that provides a basis for individual identity through critical reflection on the form and content of discourse. Students are initiated into a history of thoughts, feelings, and practices acquired in relations with teachers and others who already possess them (Rice & Burbules, 1993, p. 40). A student is encouraged to develop her own tradition of thoughts, feelings, and practices by critically reflecting upon
her acquired tradition, and by coming to accept, redefine, or reject it as part of her identity.

First, consider virtuous discourse. The virtuous discourse tradition is defined by the communicative virtues. Communicative virtues, such as patience, tolerance, and other conversational dispositions, are acquired by students in their relations with teachers and others who already possess them (Rice & Burbules, 1993, p. 40). Students who critically reflect upon and accept the communicative virtues, come to identify themselves as virtuous communicators. For example, in her relations with teachers and others who already are members of the tradition, a student begins to adopt the tradition by listening attentively and thoughtfully. After critically reflecting upon this tradition, the student accepts it as an appropriate and desirable guide for communication with others. As she engages in the accepted virtuous discourse tradition, the student comes to identify herself as a virtuous communicator, as "a good listener." The student accepts the communicative virtue as part of her individual identity.

By contrast, a student who critically reflects and does not accept, but redefines or rejects various communicative virtues, changes from her original state of having acquired the tradition from others around her and develops her own identity. For example, a student in a culturally homogeneous school acquires that part of the tradition that shows respect for differences. The student moves to a multi-ethnic community, and, upon critical reflection, deems respect for the few differences she knows as incomplete, and moves to redefine it to include her new experiences. A changed identity, expanded to include a
broader scope of differences, results from her redefinition. Yet another student acquires the part of the tradition defined by virtues of patience and tolerance. Upon critical reflection, she deems the tradition incorrect in situations where others are expressing racist beliefs. In future, she decides to reject the tradition outright as part of her identity and in fact uses it as an anti-identity of sorts, identifying herself as impatient and intolerant when hearing expressions of racist beliefs. Through these examples, we see that critical reflection on the tradition of communicative virtues acquired from others leads to the acceptance, redefinition, or rejection of the tradition as a basis for individual identity.

Next, consider rational discourse. The rational discourse tradition is based upon the development of persons who, appropriately moved by reasons, believe and act on the basis of reasons. Rational abilities and dispositions are acquired by belief-inculcation, and by encouragement to develop one's own rationality and an evidential style of belief (Siegel, 1988, p. 89). Developing one's own rationality is often aided by tradition itself because traditions "enshrine conceptions of rationality which tell us what counts as good reasons for adopting the tradition as our own . . . [and] also tell us what counts as good arguments against objections to tradition" (Worsfold, 1992, p. 331). Upon critical reflection, acceptance of the rational discourse tradition contributes to at least three aspects of individual identity: identity as a rational thinker, a self-sufficient person, and a member of rational traditions. First, a student comes to identify herself as a rational thinker by critically reflecting on and accepting the rational discourse tradition. For example, a science student participates in particular educational activities and acquires the disposition.
and abilities to reason using the scientific method. When the student critically reflects upon
and accepts the scientific method as her own guide for reasoning, she identifies herself as a
rational thinker -- able to hypothesise, gather and assess evidence, and draw clear and
concise conclusions. Second, a student comes to identify herself as self-sufficient. Through
educational activities organised around rational discourse, a student is taught and
encouraged to rely on her own ability to reason and make decisions based upon reasons --
to seek out, assess, and judge independently the rightness of claims, so that she can decide
what to believe or do. Upon critical reflection, she accepts her own ability to reason and
make decisions based on reasons and comes to identify herself as a self-sufficient person.
Lastly, a student comes to identify herself as a member of various rational traditions.
Membership in a rational tradition is acquired, in part, through an acceptance of its
standards of rationality that govern the assessment of reasons. A history student learns,
among other things, the standards of rationality of the historical tradition: what counts as a
good reason for or against some hypothesis, theory, or procedure; how much weight the
reason has; and how it compares with other relevant reasons. The student critically reflects
upon and accepts these standards of rationality that govern the historical tradition and
comes to identify herself as a member of the rational historical tradition insofar as she
accepts that part of the tradition that governs the assessment of reasons.

When, however, a student critically reflects on a rational tradition and does not
accept it, but deems it incomplete or incorrect, she redefines or rejects her previously
acquired identity and develops a new or changed identity. For example, a student reads the
novel *Wacousta* about early life in Canada and acquires as part of her identity an understanding of her own history as a Canadian. The student then reads *Quebec Women: A History* about early Canada from a woman’s perspective. Upon critical reflection on the alternative historical perspective, the student realises her previous understanding of history provides only a partial basis for identity. Appropriately moved by reasons exemplified in her latter reading, the student redefines her identity based on her new understanding of the history of which she is a part. These examples illustrate the point that critical reflection on a tradition of rational abilities and dispositions acquired from others leads to the acceptance, redefinition, or rejection of the tradition as a basis for individual identity.

Lastly, consider emancipatory discourse. The emancipatory discourse tradition is based upon assessing relations in terms of power distribution, and of acting to retain or reject those relations in order to improve the quality of life. Students who critically reflect and accept the emancipatory discourse tradition come to identify themselves as assessors of power relations. For example, in her relations with teachers and others who are already members of the tradition, a student acquires the tendency to assess the language and power relations between men and women. After critically reflecting upon this tendency, the student accepts it as an appropriate guide for action in improving quality of life, in this case the quality of relations between men and women. As she engages in the accepted emancipatory discourse tradition, the student comes to identify herself as an assessor of gender relations — calling herself a feminist, let us suppose. The student assumes assessment of gender relations as part of her individual identity.
When a person reflects on an emancipatory discourse tradition and does not accept it but deems it incomplete or incorrect, she redefines or rejects her previously acquired identity and develops her own identity. On the school playground, a child acquires the saying, “Eeny, meeny, miny, mo. Catch a nigger by the toe.” Upon critical reflection, possibly initiated by a teacher or a friend, the child realises this saying echoes relations of domination and subjugation, and deems it incorrect and oppressive. She rejects such intended playful, but hurtful, language and develops an identity as one who is aware of and is moved to eliminate oppressive language. Change in individual identity is inherent in emancipatory discourse because emancipatory discourse is about the continual assessment of the world and persons in order to transform realities that will contribute to improving quality of life and the humanisation of persons. The examples serve to show that critical reflection on an acquired tradition of power distribution and a particular quality of life leads to the acceptance, redefinition, or rejection of the tradition as a basis for individual identity.

**Social structure.** Social structure is the second characteristic of community that is instanced in virtuous, rational, and emancipatory discourse in particular ways. The social structure of the discourse: (a) is derived from agreement; (b) is influenced by the kind and quality of bonds or attachments; and, (c) provides a basis for individual identity.

2. (a) Social structure is derived from agreement.

The social structure of a discourse is derived from agreement on values or beliefs that guide and organise the discourse. Each of virtuous, rational, and emancipatory
discourse emphasise particular values and beliefs.

The social structure of virtuous discourse is derived from agreement upon expression of the communicative virtues. The communicative virtues are derived themselves, from agreement on moral and ethical imperatives, and notions of an environment that fosters the acquisition of goods achievable communicatively. The moral and ethical imperatives include respect for persons. Agreement on this leads to such expressions of the communicative virtues as self-imposition of restraint so that others may have a turn to speak, tolerance and respect for alternative points of view, and willingness and ability to listen thoughtfully and attentively to others. These expressions guide interaction among individuals, and hence are constitutive of social structure. Therefore, the communicative virtues that give rise to such expressions organise the social structure of the discourse. Communicative virtues also are derived from agreement on what constitutes a suitable environment for achieving those goods available through communication. Agreement that epistemic goods, for example, are better acquired in an environment where learning from peers as well as from the teacher occurs, leads to such expression of virtue as being open to giving and receiving criticism, being willing to listen, being inclined to admit one may be mistaken, and being able to interpret and translate one's own concerns in a way that makes them comprehensible to others. Again, insofar as agreement on these communicative expressions and others guide interaction among individuals, and thereby are constitutive of social structure, the communicative virtues organise the social structure of the discourse.
The social structure of rational discourse is derived from agreement on the importance of reasons as the basis for believing and acting, and from agreement on the process and requirements of reasoning. Agreement that reasons are the basis for believing and acting provides a motivation for seeking others in order to engage with them in discourse that may result in clarification of what to believe and do. Engaging in discourse with others in the search for and clarification of reasons is constitutive of and contributes to a network of relationships and to a social structure. Agreement on the process of reasoning includes agreement on: concern for reasonableness; reflexivity in examining the reasonableness of one's own and others thoughts; and, focussedness in the purposeful examining of reasonableness, the derivation of good reasons, and the reaching of conclusions. Agreement on the requirements of being reasonable, reflexive, and focussed entails agreement on how to interact effectively with others, that is, in establishing elements of a social structure. Insofar as agreement on reasonableness guides the discursive interaction between individuals, a particular social structure results.

The social structure of emancipatory discourse is derived from an agreement on the value or moral directive to eliminate oppressive social practices from language and power relations. Through discourse in the classroom, the teacher and students come to agree on social relations and practices free of oppression and domination, and so derive a social structure based upon emancipatory discourse. Discourse aimed at eliminating oppressive social relations and practices occurs on seemingly the smallest of issues:

... during a writer's workshop, a teacher notices that children are working on
their writing but that their voice levels are reaching a high point. Some students who need a more quiet environment for writing seem frustrated . . . . the teacher gathers all the students together. “How did writing workshop go today?” Some students comment, “Fine, it was great.” But, many remark that the noise level got too high. The teacher asks students for suggestions . . . . As a group they decide that it might help the classroom environment if soft music is played on the tape recorder . . . . Students and teacher will gather again the next day to talk about how this new procedure works. (Fredericks, Blake-Kline & Kristo. 1997. p. 35)

Through discourse, the teacher and students identified a situation that, unbeknownst to all of the students, impinged upon the learning of some students. The discourse that ensued altered the social structure enabling all to learn unimpeded during future writing workshops. Insofar as agreement on eliminating oppressive social practices from language and power relations guides the interaction between individuals, then a social structure contributory to emancipation is created.

2. (b) Social structure is influenced by the kind and quality of bonds or attachments.

Social structure is influenced by the kind and quality of bonds or attachments created by discourse. The nature and depth of these bonds are in part determined by the degree to which an individual cares for, is concerned for, and is connected to others -- by what Noddings coined the Three C’s. The Three C’s create bonds or attachments, which in turn influence the social structure of discourse. This influence is manifested in the
activities, attitudes, and behaviours of individuals and of the group. Though not entirely distinct, each of virtuous, rational, and emancipatory discourse fosters particular objects of caring, concern, and connection, and in so doing creates a social structure.

In virtuous discourse, the object of care, concern, and connection is other individuals. The degree to which individuals care for, are concerned about, and are connected to each other, defines the nature and depth of the bonds or attachments to other individuals. These bonds influence the individuals’ discursive activities, attitudes, and behaviour. If one cares deeply, communicative virtues are expressed not only because of a moral agreement on social rules, but from a genuine interest in and caring for the other. The interest and care one feels influence the content of the discourse -- “I care for you” -- as well as the form of the discourse -- a warmth in manner of voice or gesture. In short, how one feels about another influences how one engages in a discursive relationship with the other. Insofar as how one feels about another guides the interaction between individuals, the kind and quality of bonds or attachments influence the social structure of the discourse.

In the social structure of rational discourse, the object of care, concern, and connection is reasons and the pursuit of them. Caring about reason and its use and point is definitive of the appropriate disposition or critical attitude necessary to engage in rational discourse. The degree to which individuals care for, are concerned about, and are connected to the search for reasons defines the nature and depth of the bond or attachment to the involvement and participation in the pursuit of reason. Care for reasons
marks the difference between being moved by reasons and ignoring or being indifferent to them. Being so moved, or not, influences discursive activities, attitudes, and behaviour with others. Caring about reasons moves one and moves one to move others to engage in discursive activities such as questioning, looking for evidence, seeking and scrutinising alternatives and being critical of one's own ideas as well as those of others. One engages with others in these activities with behaviour reflective of one's passionate drive for clarity, accuracy, and fair-mindedness, and with an attitude consistent with one's devotion to and admiration for truth, theoretical achievement, and considered arguments, and to one's contempt of lying, distortion, and evasion. In short, how one feels about reasons influences how one is moved, how one moves to move others, and how one discursively engages in relationship with others. Insofar as how one feels about reasons influences how one discursively engages in relationship with others, the bond or attachment to the involvement and participation in the pursuit of reason influence the social structure of the discourse.

In the social structure of emancipatory discourse, the object of care, concern, and connection is the quality of human life. The degree to which individuals care for, are concerned about, and are connected to improving the quality of human life determines the nature and depth of the bonds or attachments to the belief in the moral validity of particular social rules. Bonds or attachments to the belief in the moral validity of particular social rules influence the discursive activities, attitudes, and beliefs among individuals. The degree to which an individual cares influence her listening to a speech or taking to the
streets; being diplomatic or being vulgar; and asking or demanding. In short, how one feels about improving the quality of human life influences how one becomes involved, how one moves to involve others, and how one engages in discourse with others. Insofar as how one feels about improving the quality of human life influences how one engages in discourse with others, the bond or attachment to the belief in the moral validity of particular social rules influences the social structure of the discourse.

2. (c) Social structure provides a basis for individual identity.

The social structure of a discourse is a network of relationships characterised by various forms of communicative engagement. This network of relationships provides a basis for individual identity, because identity depends to a large degree upon others who contribute to identity formation.

The social structure of virtuous discourse is a network of relationships that is characterised by engagement in the communicative virtues and which provides a basis for individual identity. Communicative virtues facilitate the interaction between individuals that contributes to the ongoing formation of identity. For example, the student who is able to express such communicative virtues as the ability to interpret or translate her questions in a way that makes them comprehensible, increases the likelihood of her questions being answered insofar as she expresses her questions clearly. The teacher who is patient, and willing and able to listen attentively, is receptive and responsive to students' efforts to interpret and translate the formation of comprehensive questions. Insofar as communicative virtues facilitate the interactive process of making and responding to
questions, virtuous discourse provides a basis for individual identity because interaction characterised by communicative virtues facilitate the attainment of epistemic goods from answered questions that become part of the student's body of knowledge constitutive of her individual identity.

The social structure of rational discourse is a network of relationships characterised by individuals who question, look for evidence from, and seek and scrutinise alternatives. Communicative activities such as questioning and seeking reasons create the social structure of rational discourse, because questioning necessitates questioning somebody and seeking reasons necessitates seeking reasons from somebody. Questioning, seeking reasons, and so on are involved in the comparison and contrast of ideas necessary to the formation of individually held beliefs. The social structure of rational discourse provides a basis for individual identity insofar as it encourages the questioning of and searching for the ideas of others that is necessary in the formation of individually held beliefs constitutive of one's identity.

The social structure of emancipatory discourse is a network of relationships characterised by a common partisanship toward the oppressed. An educational environment structured around the five components necessary for emancipatory discourse - love, faith, humility, hope, and critical thinking - fosters an awareness of social structure itself: particularly, an attentiveness to power relations and to oppressive practices that may restrict or limit individual expression and inclusion in the social structure through which identity is formed. Action is taken to create an egalitarian social structure that is free of
discourse that restricts or limits expression and inclusion. The awareness of social structure that emancipatory discourse fosters and the action that it facilitates enables all the opportunity to determine their individual identity. Insofar as identity formation involves others, and the social structure of emancipatory discourse facilitates opportunity to interact with others, the social structure of emancipatory discourse provides a basis for individual identity formation.

**Temporal and spatial structure.** Temporal and spatial structure is the third characteristic of community that is instanced in virtuous, rational, and emancipatory discourse in different ways. In each case, temporal and spatial structure affects the discourse, the discourse community, and the kind and quality of social structure produced.

Recall the three components of the social structure of a discourse. Social structure: (a) is derived from agreement, (b) is influenced by the kind and quality of bonds or attachments, and (c) provides a basis for identity. Below is a discussion of each of these components of social structure and the influences of temporal and spatial structure on them with respect to virtuous, rational and emancipatory discourse.

3. (a) Temporal and spatial structure influence social structure that is derived from agreement.

Temporal and spatial structure affects agreement on discursive expression in each of virtuous, rational, and emancipatory discourse. Discursive expression gives rise to social structure because discursive expression guides interaction between individuals. Insofar as temporal and spatial structure affect agreement on discursive expression, and
discursive expression guides interaction between individuals, temporal and spatial structure influences the social structure of the discourse.

Consider virtuous discourse. The temporal and spatial structure of virtuous discourse affects the importance placed on certain communicative virtues that guide or organise its social structure. A student and teacher are engaged in discussion both face-to-face and over electronic mail. In the face-to-face discussion, certain communicative virtues are agreed implicitly to be important — patience, thoughtful and careful listening, and self-imposition of restraint while the other speaks. In the discussion over electronic mail, agreement on the importance of the communicative virtues is affected by the difference in temporal and spatial structure. The importance of patience, listening, and self-restraint becomes less. However, the importance of being able to convey one's own concerns in a way that makes them comprehensible becomes more pronounced in the absence of gesture, tone, and intonation that help to confirm meaning in face-to-face situations. These differences in expression of the communicative virtues mark differences in the interaction between the student and teacher. Insofar as temporal and spatial structure influences expression of the communicative virtues, and expression of the communicative virtues guide interaction between individuals, temporal and spatial structure influences the social structure of the discourse.

The temporal and spatial structure of rational discourse can affect agreement on the meaning of discourse and the interaction between individuals. For example, order can affect agreement on the meaning of experiences as they are shaped by language, and thus
can influence how the entire deliberation proceeds. Order in language parallels order of experience because relations exist between linguistic structure and sensed reality (Solway, 1997, p. 7). The relation between language and experience can be seen at work almost automatically on the simplest levels of ordinary English syntax as a mimetic reproduction of the temporal order of experience. “Next Thursday and Friday are holidays.” We seldom hear anyone saying “next Friday and Thursday.” Even the reversal of the order of events in the system of predication, as in countdown, can be understood as a function of the syntax of felt experience... reverse countdown simulates the spring effect: compression generating propulsion. The rocket is propelled upward through the coil and snap of released energy: \[ \cdots \cdots \rightarrow 3-2-1-0-1-2-3 \rightarrow (\text{infinity}) \] is how we syntactically experience the event. (Solway, 1997, p. 7)

These examples show that order of language carries meaning of experience. Differences in order can affect the entire proceeds of deliberation and mark differences in the interaction among individuals. Insofar as temporal and spatial structure influences agreement on the meaning of discourse, and agreement on the meaning of discourse affects interaction among individuals, temporal and spatial structure influences the social structure of the discourse.

Temporal and spatial structure of emancipatory discourse can affect the arrangements between people that may constitute oppressive social practices. Tom Calvert, a professor at Simon Fraser University, suggests that “people who are shy or
diffident about presenting their ideas in a large class might be more open to getting into a discussion in a computer-mediated conference" (Gooderham, 1997, p. A6). Calvert's comment suggests that the intimidation some students may feel in a large class that limits or restricts discursive exchange may be diminished in a computer-mediated environment where individuals are separated by distance which oftentimes allows more freedom to express ideas. Simon Fraser University student, Sean Martin echoes Calvert by claiming that communication on the computer "removes some of the barriers than if you were talking one on one. Because of the different means of communication, people can express different ideas and be more free" (Gooderham, 1997, p. A6). Calvert's and Martin's comments imply that temporal and spatial structure affect how participants engage in discourse including how much oppressive discursive practices are engaged. Insofar as temporal and spatial structure influences how participants engage in discourse, temporal and spatial structure influences the social structure of the discourse.

3. (b) Temporal and spatial structure influence social structure that is influenced by bonds of kinship and affection.

Temporal and spatial structure affect the degree to which individuals care, are concerned, and are connected, which defines the nature and depth of bonds or attachments within each of virtuous, rational, and emancipatory discourses. Bonds or attachments influence discursive activity, attitude, and behaviour constitutive of the social structure of the discourse. Insofar as temporal and spatial structure affect bonds or attachments, and bonds or attachments affect discursive activity, attitude, and behaviour constitutive of
social structure, temporal and spatial structure influence the social structure of the discourse.

Consider virtuous discourse. Temporal and spatial structure affects the degree to which individuals care for, are concerned about, and are connected to other individuals. The influence of temporal and spatial structure on the Three C’s is apparent in such cultural evidence as discursive expressions themselves. Consider the expressions, “Absence makes the heart grow fonder”, “Time is the best medicine for anger”, or “Do not say something in the heat of the moment that you’ll regret.” The first saying illustrates an awareness of the relation between distance and how one feels toward another. the second relates to time and feeling, and the third connects time, how one feels, and discourse. Temporal and spatial structure can affect how one feels; that is, the degree to which one cares, is concerned, and is connected. The care one feels for another can influence the content of the discourse -- “I care for you” -- and the form of the discourse - - a warmth in manner of voice or gesture. Insofar as temporal and spatial structure can affect how one feels toward another, the nature and depth of the bond between individuals, temporal and spatial structure influence discursive activity, attitude, and behaviour between individuals constitutive of the social structure of the discourse.

The temporal and spatial structure of rational discourse affects the degree to which individuals care for, are concerned about, and are connected to the search for reasons which defines the bonds or attachments to general lines of action or goals related to the pursuit of reasons. Consider a “not in my backyard” scenario, a public council meeting in a
town considering a proposal for a nuclear waste disposal facility. Those not directly affected by the proposed facility, that is, those distanced in time and space, may care about the pursuit of reasons differently from those for whom the facility is to occupy their backyard as part of their immediate reality. Different sorts of reasons may be pursued with differing degrees of vigour. Those distant from the facility may consider the potential job opportunity for local residents or the cost effectiveness of the location and communicate their findings in a presentation at the meeting. Those in the immediate vicinity of the proposed facility may consider the capability of the available technology to deal with emergencies or the safety of transporting hazardous waste through the community and communicate their findings in a demonstration or a rally. Insofar as temporal and spatial structure affect how one feels about the pursuit of reasons, and the subsequent bonds or attachments to lines of action or goals related to the pursuit of reasons which influence discursive activities, attitudes, and behaviour between individuals, temporal and spatial structure influence the social structure of the discourse.

The temporal and spatial structure of emancipatory discourse affects the degree to which individuals care for, are concerned about, and are connected to improving the quality of human life which defines the bonds or attachments to belief in the moral validity of social rules. Consider the responses of two individuals to images of human suffering seen daily on the evening television news. One person is moved, another is not. The first person watches the images of human suffering and is moved to become involved, to involve others, and to engage discursively in order to improve the quality of those others'
lives. She cares, is concerned, and is connected to those others because, though separated from them, she senses having shared time and space with those others during the moments their images were in her living room. At seeing the same images of human suffering, the second person is not moved to improve the quality of the others’ lives. She is not moved to become involved, to involve others, or to engage discursively in order to improve the quality of those others’ lives. She does not deeply care, is not deeply concerned, and is not closely connected to those others because, out of immediate time and space, those others are merely images and not live people. In either case, the temporal and spatial structure influences how each feels about improving the quality of human life which, in turn, influences how each becomes involved, involves others, and engages discursively in relationship with others. Insofar as temporal and spatial structure influences the degree to which individuals care for, are concerned about, and are connected to improving the quality of human life which influences discursive activities, attitudes, and behaviour between them, temporal and spatial structure influences the social structure of the discourse.

3. (c) Temporal and spatial structure influences social structure that provides for individual identity.

Temporal and spatial structure affect the ability to make and respond to appeals to and from others as sources for objects of self-fulfilment which contributes to the ongoing formation of individual identity. Changes in the ability to make and respond to appeals to and from others affect interaction between individuals constitutive of the social structure.
of the discourse.

The **temporal and spatial structure of virtuous discourse** affect expression of the communicative virtues that facilitates interaction between individuals and contributes to the ongoing formation of individual identity. Consider communication by electronic mail that enables a discontinuous and discontiguous discourse out of immediate time and space. The absence of immediate time and space affects the ability to express the communicative virtues. For example, the ability to interpret and translate one’s own concerns and the concerns of others may be affected in communication whereby those engaged are separated in time and space. Tone, intention, and motivation, interpreted and translated from discursive information such as intonation, gesture, posture, or eye contact while in the presence of the speaker, may be affected. The intended meaning of an ironic or sarcastic statement, for example, may be revealed in intonation. In the absence of intonation in communication by electronic mail, irony and sarcasm could easily be misinterpreted. The absence of various sources of discursive information influence the ability to interpret and translate one’s own concerns and the concerns of others. Insofar as temporal and spatial structure influences the ability to express the communicative virtues, and the ability to express the communicative virtues influences the interaction between individuals that contributes to the ongoing formation of individual identity, temporal and spatial structure influences social structure that provides for individual identity.

The **temporal and spatial structure of rational discourse** influence the ability to reason in the comparison and contrast of the ideas of others. Comparing and contrasting
ideas is constitutive of the social structure of the discourse and contributes to the
formation of individually-held beliefs constitutive of one's identity. Consider Figure 1
which illustrates a series discourse and a parallel discourse, analogous to face-to-face
discourse and discourse over electronic mail. The series discourse (Sequence 1) occurs in
immediate time. The parallel discourse (Sequence 2) occurs in asynchronous time.

\[ t_i = \text{time}; \ P_j = \text{person} \ j; \ S_{jk} = k\text{th statement by } P_j \]

**Sequence 1 - Series Discourse**

- \( t_1 \)  \( P_1: S_{11} \)
- \( t_2 \)  \( P_2: S_{21} \) response to \( S_{11} \)
- \( t_3 \)  \( P_1: S_{12} \) response to \( S_{21} \)
- \( t_4 \)  \( P_3: S_{31} \) response to both \( S_{11}, S_{21}, S_{12} \)

**Sequence 2 - Parallel Discourse**

- \( t_1 \)  \( P_1: S_{16}; P_2: S_{26}; P_3: S_{36} \)
- \( t_2 \)  \( P_2: S_{27} \) response to \( S_{36} \)
- \( t_3 \)  \( P_3: S_{37} \) response to \( S_{16} \)
- \( t_4 \)  \( P_1: S_{17} \) response to \( S_{26} \)

**Figure 1** Series discourse and parallel discourse.

The temporal structure of the discourse influences interaction among individuals. In series
discourse, all are involved in a single conversation developing over time. There is a linear
progression in the comparison and contrast of ideas. In parallel discourse, as the name
implies, multiple conversations may occur at any given time, though the conversations are
markedly different from series discourse because those spoken to may not be listening to
those speaking. Person 2 is responding to Person 3 who is not listening but is responding
to Person 1 who also is not listening because she is responding to Person 2. In parallel
discourse, each participant may "pick and choose" those ideas she wishes to pursue in the
comparison and contrast of ideas that contribute to the ongoing formation of her identity. Parallel discourse can occur in face-to-face communication. Particularly in a room with many people, there may be multiple conversations occurring at a given time, those spoken to may not be listening to those speaking, and each participant may choose from a multitude of ideas those that she wishes to pursue. The primary difference between series and parallel discourse is the issue of conversational control. In series discourse, only one person, the speaker, controls the conversation at any given time. Whomever is speaking may of course change the direction of the conversation, return to a point made earlier, or be interrupted and relinquish control of the conversation. In series discourse, the conversational control rests only with one speaker, because only one person may speak at a time. In parallel discourse, particularly that which occurs in asynchronous time, all have access to conversational control. As a result, it may become unclear who has control of the conversation and in what direction the conversation is going. Temporal and spatial structure affect social structure that provides for individual identity because temporal and spatial structure affect the communicative process of comparing and responding to the ideas of others that contributes to the ongoing formation of individual identity. Insofar as temporal and spatial structure influences the ability to compare and contrast the ideas of others, and comparing and contrasting the ideas of others influences the interaction between individuals that contributes to the formation of individual identity, temporal and spatial structure influences the social structure of the discourse that provides for individual identity.
The temporal and spatial structure of emancipatory discourse influences discursive power relations and oppressive practices that may restrict or limit individual expression and inclusion in the social structure through which identity is, in part, formed. Consider a graduate student who reads an article written by a university professor and, by electronic mail, sends him positive comments about the article in general, but questions some of his assumptions, admitting she would never be so 'brazen' in person. Intimidation from the power relation she feels in the professor's presence is eliminated in the absence of immediate time and space. Out of his presence, the student is more confident to express criticism and to receive the professor's response to her criticism. Over electronic mail, she feels free to be 'brazen' and to engage with the professor in a discursive social structure that does not restrict or limit expression. Because discursive expression is not restricted or limited, identity formed through discursive expression and engagement is also not restricted or limited when intimidation in the language and power relation is eliminated in the absence of time and space. Insofar as temporal and spatial structure influence the realisation and manifestation of language-power relations, and language-power relations influence the interaction between individuals that contributes to the ongoing formation of individual identity, temporal and spatial structure influence the social structure of the discourse that provides for individual identity.

Summary

I have established that community is an important educational goal and related to important educational goals. Community is important to education because community,
specifically discourse community, is an end and the means of education. The examples of virtuous, rational, and emancipatory discourse illustrated a variety of educational ends and means. These discourses were also discussed in terms of the characteristics of community instanced in each. As forms of discourse can display a variety of educational ends and means, and forms of discourse are constitutive of discourse communities, it must be the case that discourse communities display the same variety of educational ends and means. Thus, community is an important educational goal and related to important educational goals.
Chapter Four: Distance Education Environments and Educational Discourse

This chapter is guided by the claim that community is missing from or unrealisable in distance education environments. I will address this claim by considering the question: “How do distance education environments affect the expression of and the need for educational discourse?” If distance education environments affect educational discourse then it follows that distance education environments affect educational discourse communities, because forms of discourse are constitutive of discourse communities. First, I shall briefly describe what I mean by distance education environments. Then, I shall discuss how distance education environments might affect each of the educational discourses discussed prior: virtuous, rational, and emancipatory discourses.

Distance education environments constitute those educational environments in which communication is mediated technologically between people occupying different localities. Distance education environments are characterised by the adoption of increasingly sophisticated communications technologies as such technologies become available. “One of the most important instructional elements of contemporary distance education is interaction” (Kearsley, 1995). and it is this interactive distance education environment to which I shall focus my discussion. I will sometimes refer to the traditional classroom environment as “face-to-face”, and to distance education environments as “screen-to-screen”. The term screen-to-screen refers to communication technologies primarily related to electronic mail, audio-only conferencing, and audio-video.
conferencing, because combinations of these three technologies are the dominant mediums of communication in today’s distance education environments.

**Virtuous Discourse**

Virtuous discourse is characterised by communicative virtues that are situational. Situation or context is in part defined by medium of communication. Distance education environments affect virtuous discourse insofar as distance education environments affect the expression of the communicative virtues.

Consider a few of the communicative virtues in the context of distance education environments. Patience is the capacity for calm self-possessed waiting, and, in discourse, involves waiting for another to think and articulate her thoughts. In screen-to-screen environments such as audio-video conferencing, one expresses patience as one would when face-to-face, because waiting in immediate time is common to both environments. However, though communication occurs in immediate time, patience is affected by audio-only environments because visual cues that indicate the other is thinking and about to speak are absent. One must rely solely upon auditory cues which may need to be as overt as “Wait, I’m thinking.” In asynchronous screen-to-screen environments such as communication by electronic mail, patience is expressed insofar as one waits for the other to think and respond, but it is a separate or autonomous patience because the individual is detached from the other. The one expressing patience knows not if she is waiting for the other to think and articulate her thoughts, or if she is waiting for the other to check her mail or finish responding to someone else, or if she may be waiting indefinitely because the
other is away on holiday or simply does not wish to respond. One must express patience separate from the other not knowing what one is waiting for. Distance education environments affect expression of the communicative virtue, patience, and so affect virtuous discourse.

Consider another communicative virtue, respect for differences. Respect is prizing those human dimensions that make individuals diverse and working hard to understand those different from oneself (Egan, 1994, p. 53). Differences include those related to race, gender, age, and physical ability, as well as personality, idiosyncratic behaviour, attitude, and belief. Distance education environments affect respect for differences insofar as distance education environments affect the experience of differences themselves that are to be prized and understood. Differences are often communicated quickly and implicitly in face-to-face environments. However, in screen-to-screen environments such as communication by electronic mail, differences can be expressed only crudely and slowly through textual description -- for example, "I am a 5-foot 30-year-old Black woman."

This difference in experience affects how one is able to prize and understand those different from oneself. Though I am cognisant that the woman is Black and 5-foot tall, I cannot see the blackness of her skin or that she stands to the level of my chin. I understand even these simple human dimensions differently than when in her presence, because the sensual wholeness of that which makes her different is affected when mediated technologically.

Understanding differences of personality, idiosyncratic behaviour, attitude and
belief is also affected in screen-to-screen environments, because sometimes understanding subtle differences requires a continuity or repetition of experience. If one were to engage regularly and frequently in audio-video conferencing with another, some differences nevertheless would simply not be experienced — how close someone stands and how much an individual touches during conversation, the nuances of an embrace in greeting and farewell, and whether a person smells like flowers, cigarettes, or garlic. Distance education environments affect respect for differences insofar as technologically mediated communication affect the experience of differences that are to be prized and understood.

Consider the communicative virtue, thoughtful and attentive listening. Listening refers to the ability to capture and understand the messages individuals communicate, whether these messages are transmitted verbally or non-verbally, clearly or vaguely (Egan, 1997, p. 90). Individuals communicate messages using verbal descriptions of experiences, behaviour, and affect, and non-verbal bodily behaviour, facial expression, voice-related behaviour, physiological responses, physical characteristics, and general appearance (Egan, 1994, p. 95). Distance education environments affect the communicative virtue, listening, insofar as distance education environments affect the ability to capture and understand these verbal and non-verbal messages. In screen-to-screen environments such as communication by electronic mail, listening is simply irrelevant. No messages are communicated verbally or non-verbally, only textually. In audio-only environments, listening is also affected. Though one may be able to capture and understand the content of messages transmitted verbally, as well as that part of the message transmitted in the
tone, volume, or intonation of voice, the non-verbal is absent. For example, one may not be able to capture or understand irony or sarcasm if one cannot see the speaker who belies the literal meaning of her words with a twinkle in her eye or a sardonic smile. In audio-video environments, one captures and understands verbal and non-verbal messages virtually as one would when face-to-face because one is able to hear the verbal and see the non-verbal. But even here, capturing and understanding nuances of the message, particularly those communicated physically, may be affected. The emphasis when a speaker points and shakes her finger, or the intimacy when a speaker leans forward to share a secret, is affected by the separation in distance between the speaker and the listener. Distance education environments affect the ability to listen insofar as distance education environments affect the ability to capture and understand both the verbal and non-verbal messages individuals communicate.

Consider another communicative virtue similarly affected by distance education environments, the ability to convey one's concerns in a way that makes them comprehensible to others. Conveying one's concerns involve verbal and non-verbal communication. Distance education environments affect the ability to interpret and translate one's concerns in a way that makes them comprehensible to others insofar as distance education environments affect the ability to communicate such concerns verbally and non-verbally. In asynchronous screen-to-screen environments such as communication by electronic mail, one can communicate concerns only textually. Non-verbal communication is simply not relevant, and, as a result, aspects of the concern such as
urgency or excitement may be altered or even lost in the translation. A high degree of textual competence is necessary. In audio-only environments, one may communicate voice-related behaviour such as tone, volume, or intonation; however, one cannot communicate aspects of the concern through bodily behaviour, facial expression, physiological responses, physical characteristics, or general appearance. A smile, a tear, or a blush cannot be communicated in such environments. In audio-video environments, one can communicate orally and visually with another in much the same way as face-to-face. But even here, aspects of communication transmitted by touch are lost -- a warm embrace or a consoling hug -- and some concerns seem simply more appropriately shared in the presence and company of the other -- the death of a loved one or the birth of a child. or. in education. “talking out” a difficult problem or the “Eureka!” of discovery and understanding. Insofar as distance education environments affect the ability to communicate one's concerns verbally and non-verbally, distance education environments affect the ability to interpret and translate one's concerns in a way that makes them comprehensible to others.

Lastly, consider the communicative virtue. self-imposition of restraint so that others may have a turn to speak. Self-imposition of restraint implies a sense of timing and awareness in understanding the order and inclusion of turn-taking. In asynchronous screen-to-screen environments, self-imposition of restraint is irrelevant because asynchronous time delineates no order in turn-taking. One may interject a comment at any time and simultaneously with any number of others. In immediate time screen-to-screen
environments, turn-taking operates in much the same way as in face-to-face environments because linearity of time imposes an order on conversation. Only one person may take a turn speaking at a time which to a degree imposes self-restraint on others. However, in screen-to-screen environments where participants cannot see one another, there is a risk of exclusion that may deny everyone a turn to speak. In face-to-face environments, it is comparatively easy to recognise those who are not speaking and grant those a turn simply by saying, for example, "... and so, what do you think?". But when one cannot see all participants, there is a risk that less gregarious persons may become absent from the conversation because, out of sight, they are not recognised as not contributing. Distance education environments affect self-imposition of restraint so others may have a turn to speak insofar as distance education environments affect order and inclusion in turn-taking.

**Rational Discourse**

Rational discourse is characterised as being reasonable, reflective, and focussed. In order to engage in rational discourse, one needs both abilities and dispositions. The abilities include those required to interact effectively with other people, to judge the soundness of information and inferences drawn from information, to produce credible information and inferences, and to maintain clarity. Distance education environments affect the realisation of these abilities and thus affect the ability to engage in rational discourse.

Consider the abilities required to engage in effective interaction with other people that requires one to employ communicative strategies and tactics to: a) keep discourse
focussed, b) communicate coherently, and c) receive communication from others intelligibly. First, keeping discourse focussed involves managing the progression of the conversation. One might: interrupt at appropriate times with words, facial expression, or gesture to make an important point or to detract from a digression; recall an important point made previously; make appropriate transitions from one topic to another; or, provide an agenda. In immediate time screen-to-screen environments, the progression of discourse occurs in much the same way as in face-to-face environments because order of discourse is imposed by linearity of time. However, in asynchronous screen-to-screen environments such as communication by electronic mail, order is affected by discontinuous time. All may communicate at once, a multitude of conversations can occur simultaneously. As a result, it may become unclear as to who has control of the conversation and in what direction the conversation is going. Keeping discourse focussed, which involves managing the progression of a conversation, may become difficult. Second, to communicate coherently, one utilises language, bodily behaviour, facial expressions, voice-related behaviour, and general appearance. For example, in a face-to-face interview, one might try to communicate confidence and competence through one's words, posture, eyes, tone, and dress. In screen to screen environments such as communication by electronic mail, one is reliant upon one's written ability as the sole means of communication. The written word communicates differently from the spoken word. Although "writing separates and extends the visual power of words, it is comparatively crude and slow [to the spoken word]

Many a page of prose and many a narrative have been devoted to expressing what was, in
effect, a sob, a moan, a laugh, or a piercing scream" (McLuhan, 1964, p. 79). The written word spells out in sequence what is quick and implicit in the spoken word. Distance education environments that affect the speed and implicitness of spoken expression affect the relative coherence of communication. Lastly, receiving communication from others intelligibly involves interpreting the context of the discourse. In audio-video screen-to-screen environments, the vast reality in which the discourse occurs is framed by the area of the screen, which sometimes cannot capture this reality accurately. Language that attempts to further describe the context, though "it extends and amplifies man [sic]. . . . also divides his faculties. His collective consciousness or intuitive awareness is diminished by this technical extension of consciousness that is speech" (McLuhan, 1964, p. 79). Limited by language, hearing, "I love you", for example, simply may not encapsulate the sentiment the other attempts to communicate. The intelligibility of others' communication that is technologically restricted to and by language in distance education environments may be affected if isolated from the context of the discourse. Distance education environments affect the ability to engage in effective interaction with other people insofar as distance education environments affect the abilities to keep discourse focussed, to communicate coherently, and to receive communication from others intelligibly.

A second ability required to engage in rational discourse is the ability to judge the soundness of information and inferences drawn from information. Making sound judgements constitutes the assessing of reasons and their ability to warrant beliefs, claims, and actions. It requires a grasp of field-specific criteria, and a general understanding of the
nature of reasons, warrant, and justification as these notions function across specific fields.
Distance education environments affect the ability to make sound judgements insofar as such environments can affect one's grasp of the specific field upon which one applies general principles of reason, warrant, and justification. For example, Richard Soberman, a transportation planner and professor of civil engineering at University of Toronto, observed that computers often affect his students' ability to make sound judgements (Gooderham, 1997).

Last year a test required them to design a ramp for a bridge that would travel the Western gap, the shipping channel between downtown Toronto and the islands to the south. The correct length of the ramp was 240 metres, but Dr. Soberman was shocked when students submitted answers making it everywhere from 24 metres to 24 kilometres long. . . . [Dr. Soberman commented,] “With computers, you lose a certain amount of feel for the magnitude of something.” (Gooderham, 1997, p. A8)

The technologically mediated field caused some students to “lose touch” with the magnitude or scope of reality. For some students, information and inferences drawn from the abstract problem presented on the computer screen was not transferred to the real problem in Toronto. Distance education environments affect the ability to make sound judgements insofar as distance education environments affect one’s grasp of specific fields in the real world from which information is drawn and inferences are founded.

A third ability required to engage in rational discourse is the ability to produce credible information and inferences. Information and inferences are drawn from the real
world and persons. Distance education environments affect the ability to produce credible information and inferences insofar as distance education environments are removed from the real world and persons from whence information is drawn and inferences are made. In screen-to-screen environments, one produces information and inferences about the real world while removed from it. Technology that mediates the real world acts as a lens of sorts through which one sees the real world. This lens may distort one’s perception of the world and thus the ability to produce credible information and inferences about it.

Consider again Soberman’s students who designed 24 metre and 24 kilometre ramps for a bridge that spans the Western Gap! For some students, the technologically mediated problem remained abstract and detached from reality and not the physical problem of designing a link between Toronto and the islands to the south. Students produced information and made inferences that remained isolated in the technologically mediated world presented on the screen and did not transfer their findings to their immediate experience of the real world. Insofar as distance education environments are removed from the real world and persons, distance education environments may affect the ability to produce credible information and inferences about the world and persons.

The last ability necessary to engage in rational discourse is the ability to maintain clarity about which questions are being asked, what assumptions are being made, what particular information means, and what decision is being reached. Distance education environments affect the ability to maintain clarity insofar as distance education environments affect the ability to organise discourse, and increase the need for
competence in translating specific fields of reference. In face-to-face environments, the organisation of discourse is in part defined by the linearity of time. Only one point may be made at a given time by a particular person and so discourse develops in a linear progression. Linearity of discourse facilitates clarity because the organisational development of each utterance as imposed by time is clear. In asynchronous screen-to-screen environments such as communication by electronic mail, maintaining clarity may become more difficult. Any individual may communicate a message at any time in response to any message sent prior. Conceivably, discourse can develop exponentially. Exponential discourse can blur clarity because a message may evolve from any combination of messages before, the organisational combination of which is known only to the speaker. Distance education environments also affect the ability to maintain clarity, insofar as distance education environments increase the need for competence in translating specific fields. Persons communicating in distance education environments are separated from the specific fields to which they refer in discourse. Each speaker is separated in time and space from the reality of the other which is the context of the other’s discourse. Distance education environments increase the need for competence in translating specific fields because it is within the context of these fields that questions are asked, and assumptions and information are drawn. Distance education environments affect the ability to maintain clarity insofar as distance education environments affect the ability to organise discourse, and increase the necessity for accurate translation of the real situations in which questions, assumptions, and information exist.
Emancipatory Discourse

Emancipatory discourse is characterised by a partisanship toward the oppressed. There are five requirements necessary to engage in emancipatory discourse: love, humility, faith, hope and critical thinking. Distance education environments affect engagement in emancipatory discourse insofar as distance education environments affect the realisation of these requirements necessary to engage in emancipatory discourse. Consider each in the context of distance education environments.

First, emancipatory discourse requires love for the world and for persons that denies subordination of agency and interests. Distance education environments affect love that denies subordination of agency and interests insofar as distance education environments affect the perception of the other and the interests of the other. For example, Michael Rennick gives homeless persons disposable cameras for a day and allows them to shoot whatever photographs "they deem to be important and worthy." Then he posts these photographs onto the Web site [entitled Vagrant Gaze] along with an interview with each homeless photographer . . . . [But] one of Rennick's reservations about the site is that it "sanitizes and cleans up homelessness" because the technology gets in the way of really understanding the condition . . . . [He adds] "but at least it allows the homeless to have a voice and an opportunity to connect and communicate with others." ("Vagrant Gaze," 1998)

Though this project gives exposure to a group previously silent, as Rennick observes, the
agency and interests of the group have been altered by the very technology that grants them a voice. The homeless condition is altered, it is sanitised and cleansed. Viewers of the Web site who become attached to the images they see will engage in discourse and possibly take action based upon a technologically altered version of the homeless experience. In this case, technology may in fact contribute to rendering the individual’s agency and interests vulnerable to continued or redirected subordination. Distance education environments affect the ability to love that denies subordination of agency and interest insofar as technology affects perception of the other and the interests of the other.

Emancipatory discourse requires humility. Humility is freedom of pride and arrogance, a modesty of spirit and ability to view others and oneself realistically. Humility is affected by distance education environments insofar as distance education environments affect how one views others and oneself. Recall the brazen graduate student who overcame intimidation by communicating with a professor over electronic mail. When face-to-face, the student viewed herself in a subordinate role to the professor. She perceived the professor might lack humility, that he might project ignorance onto her, regard himself different from her, regard discourse as an activity for an elite of which she was not part, or be closed to her contributions and afraid himself of being displaced. Over electronic mail however, in the absence of immediate time and space, the student viewed herself as brazen enough to overcome her perception and to communicate freely and openly with the professor about an article he had written. The professor displaced the student’s fear by responding positively and the perceived power structure diminished.
Illustrative in this example, distance education environments affect how one views oneself and others and so affect how one is able to realize humility necessary to engage in emancipatory discourse.

Emancipatory discourse requires faith in persons' ability to engage in discourse itself and in persons' ability to create and transform through discourse. Emancipatory discourse also requires hope that discourse can in fact lead to eliminating oppressive social practices. In short, emancipatory discourse requires faith in the ability of persons to change, and hope in the ability of discourse to be a vehicle for change in persons. Consider again, Michael Rennick's Web site project, Vagrant Gaze. The technology of the Web site gives the homeless a voice, but does not, as Rennick implied, necessarily grant them an opportunity to connect and communicate with others leading to transformation through discourse and the elimination of oppressive social practices. Connection and communication imply a mutuality, at the least a common awareness of the connection and communication between those so engaged. Though Rennick's homeless may succeed in connecting and communicating to others, they may not necessarily experience an affirmation of their connection and communication because those they speak to are absent, separated by distance. If they continue to hear silence, despite having found their voice, faith in their own and others' ability to engage in discourse and to create and transform through discourse may diminish, as may hope in the ability of discourse to eliminate oppressive practices. Separated by distance, there may be little opportunity for affirmation that engaging in discourse has made a difference. Distance education environments affect
faith in persons and hope in discourse insofar as distance education environments affect affirmations of the abilities of persons and discourse that in turn contribute to continued discourse aimed at eliminating oppressive social practices.

Emancipatory discourse requires critical thinking in the assessment of oppressive social practices in the world and persons and in determining action to be taken that will transform realities of oppression into those that contribute to the humanisation of persons. Distance education environments affect critical thinking in the assessment of oppressive social practices and in determining action toward eliminating such practices insofar as distance education environments affect the perception of realities of oppression themselves. Once again, consider the Web site, Vagrant Gaze. Its creator, Michael Rennick, observed that technology gets in the way of really understanding homelessness ("Vagrant Gaze," 1998). According to Rennick, technology sanitised homelessness, including the day-to-day hopelessness that constitutes it as a reality of oppression.

Critically thinking on this version of the condition may affect one's assessment of and the action to be taken toward eliminating it. One might assess homelessness on its face as an economic condition, the elimination of which would entail economic support in the provision of shelter, food, medicine, and so on. This would be a good start. But from only a surface view in Rennick's Web site pictures, perceiving and assessing the "beneath the surface" reality of homelessness as a social and psychological condition may be more difficult. Without action taken toward eliminating these aspects of homelessness, the reality of the oppressive hopelessness characteristic of those homeless is not addressed and
thus may be likely to continue and so too the condition itself of homelessness. Insofar as distance education environments affect the perception of realities of oppression, distance education environments affect the ability to think critically when assessing and determining action toward eliminating oppressive social practices.

Summary

Distance education environments affect the expression of and the need for educational discourse insofar as distance education environments affect the specific requirements and abilities necessary to engage in educational discourse. Distance education environments that affect educational discourse affect educational discourse communities, because forms of discourse are constitutive of discourse communities. The next and last chapter will consider the educational relevance and importance that effects of distance education environments have on discourse communities.
Chapter Five: Discussion and Conclusions

The purpose of this thesis was to create a case for the concern that aspects of community important to education are missing or unrealisable in distance education environments. After defining “community”, a case was made for communities as being important to education, particularly, communities of discourse. Communities of discourse are important to education because, in short, communities of discourse are the ends and means of education. A variety of these ends and means were illustrated through descriptions of three education discourse communities. In the previous chapter, distance education environments were discussed in terms of their effects on the expression of and need for educational discourse. Such effects have implications for educational discourse communities because the forms that discourse takes are constitutive of discourse communities.

In this fifth and final chapter, I shall summarise the hypothesised effects of distance education environments on educational discourse. Then, I shall discuss what, if any, of these hypothesised effects should matter to educators. In terms of discourse and discourse communities, what are the valuable and detrimental effects of distance education environments on education? I shall end my discussion with some thoughts on the philosophical and practical ramifications of this discussion and some suggestions for further study.

The next few paragraphs provide a summary of the hypothesised effects of
distance education environments discussed in the fourth chapter. First, it can be said that certain requirements and aspects of discourse are time-dependent and are made more difficult or in some cases deemed irrelevant in asynchronous distance education environments. For example, requirements for rational discourse such as effective interaction to keep discourse focussed and maintaining clarity are made more difficult when not conducted in real time because focussedness and clarity are facilitated by real time, insofar as the linearity of real time imposes an order or linear progression upon the discourse. Other aspects of discourse become irrelevant in asynchronous distance education environments because the element of time that orders the back and forth verbal exchange is irrelevant. Communicative virtues such as patience, listening, and self-imposition of restraint become obsolete. Patience and listening over time while the other speaks, and practising restraint in allowing only one person to speak at a given time become irrelevant in communication by electronic mail, for example, where all may speak simultaneously.

Other requirements and aspects of discourse utilise both verbal and non-verbal communication to articulate and respond to the world and persons. These requirements and aspects of discourse are made more difficult in distance education environments insofar as technologically mediated discourse affects the ability to utilise verbal and non-verbal communication. For example, communicative virtues such as the ability to interpret and translate one's concerns in a way that makes them comprehensible to others is made more difficult in distance education environments that restrict communication to text only.
The ability to interpret and translate one's concerns verbally and non-verbally is affected because one cannot utilise volume and intonation of voice, bodily behaviour, facial expression, and general appearance to convey one's concerns. Similarly, rational discourse that requires one to interact effectively in order to communicate coherently is also affected. Verbal and non-verbal communication utilised to interact effectively becomes obsolete in text-only distance education environments. Communication in such environments is highly dependent on textual competence. It is true that other distance education environments can more or less accommodate verbal and non-verbal communication because participants can hear and see each other, but even in these environments, some verbal and non-verbal communication may be affected, particularly communication by touch.

Lastly, discourse involves communication about the world and persons and is made more difficult in distance education environments insofar as distance education environments affect the perception of the world and persons. For example, in virtuous discourse, respect for differences may be affected in technologically mediated discourse because differences themselves may be perceived differently insofar as the ability to become aware of differences through one's visual, aural, and tactile senses is restricted. In rational discourse, the ability to judge the soundness of information and inferences drawn from information may be affected in distance education environments insofar as such environments can affect one's grasp of specific fields in the real world from which information is drawn and inferences are founded. Information and inferences drawn from
an abstract technologically mediated problem may simply not be transferred to the concrete problem in the real world. Distance education environments that affect the perception of the world and persons have potentially far-reaching effects for emancipatory discourse because distance education environments may affect the perception of oppressive social practices, themselves, that emancipatory discourse aims to assess and eliminate. Distance education environments may also affect the requirements necessary for engaging in emancipatory discourse. For example, emancipatory discourse that requires love for another in such a way that denies subordination of agency and interests is made more difficult in distance education environments that affect the perception of the other and the interests of the other. Similarly, emancipatory discourse that requires humility is made more difficult in distance education environments that affect how one views others and oneself.

To summarise to this point, there are three hypothesised effects of distance education environments on educational discourse. First, distance education environments affect those requirements and aspects of discourse that are time-dependent. Second, distance education environments affect those requirements and aspects of discourse that utilise verbal and non-verbal communication. And finally, distance education environments affect discourse because distance education environments affect the perception of the world and persons about which we engage in discourse.

Having considered the effects of distance education environments on discourse, what, if any, of these effects should matter to educators? The sort of effects that should
matter to educators are those related to the ends and means of education. Consider the ends and means of education as they were discussed in Chapter Three, outlined as justifications for engaging in educational discourse. The hypothesised effects of distance education environments on the ends and means of education are:

1) Distance education environments affect the educational end showing respect for persons;
2) Distance education environments affect democratic living;
3) Distance education environments affect the attaining of valuable goods:
4) Distance education environments affect the ability to be self-sufficient:
5) Distance education environments affect initiation of students into the rational traditions;
6) Distance education environments affect reciprocity in learning from the exchange of ideas; and,
7) Distance education environments affect the production of self-knowledge.

First, distance education environments affect the educational end showing respect for persons. Virtuous, rational, and emancipatory discourses contribute to this end. Specifically, time-dependent communicative virtues of patience, self-imposition of restraint, and listening contribute to respecting the student’s right to have and express her unique feelings, thoughts, and beliefs. Asynchronous distance education environments that deem patience, listening and restraint irrelevant, do not facilitate respect for students as persons through such virtuous practice. In rational discourse, the ability to interact effectively contributes to respecting the student’s right to question, challenge, and seek
reasons, explanations, and justification. Asynchronous distance education environments that affect focussedness and clarity of interaction that is ordered by the linearity of real time make more difficult the ability to question, challenge, and seek reasons, explanation, and justification, and so do not facilitate respect for students' right to do so. Emancipatory discourse that requires an awareness of oneself and others contributes to respect for students' right to have equal opportunity to engage in discourse. Distance education environments that affect how one views oneself and others may not facilitate respect for students as persons insofar as such environments affect the perception of equality when engaging in discourse.

Distance education environments affect democratic living. Rational and emancipatory discourse constitute requirements for democratic living. Rational discourse fosters the ability to make sound judgements on information and inferences drawn from information, which is required to be critical and consenting citizens of democratic living. Distance education environments that limit one's grasp of specific fields from which information is drawn and inferences are founded do not contribute to democratic living through the making of sound judgements. Emancipatory discourse contributes to democracy because emancipatory discourse encourages in students the assessment of interests underlying differences and the elimination of social practices embodying those interests not compatible with democratic living. Distance education environments that affect the perception of oppressive social practices that emancipatory discourse aims to assess and eliminate may not contribute, and may even subvert, democratic living.
Distance education environments affect the attaining of valuable goods. Virtuous discourse is a means of attaining valuable goods. The ability to interpret and translate concerns in a way that makes them comprehensible to others facilitates communicative expression of and response to appeals to others, which is the means of attaining epistemic and other goods achievable communicatively. Both verbal and non-verbal communication is utilised to increase clarity of expression in appealing to teachers and students for epistemic goods. Distance education environments that restrict verbal and non-verbal communication hinder the interpretation and translation of concerns, and do not facilitate the attainment of goods achievable communicatively.

Distance education environments affect the ability to be self-sufficient. Rational discourse is an end of education in the sense that engaging in rational discourse in part constitutes self-sufficiency, which is a goal of education. Self-sufficiency requires reasoning independently to conclusions about what to believe and decisions about what to do. Making sound judgements is required to reason properly that is necessary for self-sufficiency. Distance education environments that affect the ability to make sound judgements insofar as such environments affect one's grasp of specific fields from which information is drawn and inferences are founded, affect the ability to be self-sufficient.

Distance education environments affect initiation of students into the rational traditions. The rational discourse tradition is in part constitutive of initiation into the rational traditions, which is a goal of education. All requirements of rational discourse constitute in part the rational traditions. The ability to interact effectively and to make
sound judgements are requirements of rational discourse and, as discussed above, may be affected by distance education environments. Distance education environments that affect the requirements of rational discourse affect initiation into the rational traditions.

Distance education environments affect reciprocity in learning from the exchange of ideas. Emancipatory discourse is a means of contributing to reciprocity. Learning occurs from an exchange of ideas. Emancipatory discourse fosters learning through mutual exchange of experiences and ideas by aiming to eliminate oppressive social practices that restrict or limit the mutuality of exchange. Distance education environments that affect the perception of oppressive social practices that emancipatory discourse aims to assess and eliminate affect learning from the reciprocal exchange of ideas.

Distance education environments affect the production of self-knowledge. Emancipatory discourse is a means of contributing to the production of self-knowledge, because emancipatory discourse aims to foster relations free of oppression that may restrict or limit the process of interaction that leads to self-knowledge. Distance education environments that affect the perception of oppressive practices and relations affect the process of interaction that is the means of gaining self-knowledge.

In these final few paragraphs, I would like to consider briefly some of the ramifications, both practical and philosophical, for community as the means and an end of education in the context of the trend toward distance education environments. Practically speaking, community as the means and an end of education has significant ramifications for the trend toward distance education environments and suggests several areas of future
research.

First, we need to investigate ways of maximising the realisation of community, particularly in distance education environments. Since community has been shown to have educational value as both the means and an end of education, such research constitutes an important aspect of bringing community into the education experience. Some excellent research by, for example, Noddings (1992) and Martin (1992) has been done. The effort could be expanded.

Second, we need to investigate further the effects of distance education environments on education and particularly on communities of discourse important to education. The trend toward distance education is being pursued without a clear understanding of its effects. Such research constitutes a responsibility we have as educators to be aware of and promote educational techniques and technologies that best facilitate our educational goals.

Finally, the construct of community should prove useful in the evaluation of distance education environments. Distance education environments unable to realise the desirable goal of community might be abandoned or supplemented by education environments that could. Distance education environments able to realise this goal of community might be sought out and studied for their effect on other desirable goals.

Philosophically speaking, the goal of community also has interesting ramifications. The goal of community could serve to open questions concerning the aims of education. What is the kind of community into which we wish to initiate our young people?
sort of individual is it that we wish to develop? And, what is the role and responsibility of education in the development of this individual? What sort of social group is it that we wish to (re)produce? And, what is the role and responsibility of education in the reproduction of this social group? These questions mark a return to normative philosophy of education, to questions concerning the aims of education which do not attract the interest philosophers of education traditionally have paid them (Siegel, 1980, p. 20).

The precise effects of distance education environments on educational discourse are not entirely clear, but one can be certain that distance education environments do affect discourse, and thus affect discourse communities, because forms of discourse are constitutive of discourse communities. That distance education environments should affect discourse communities is clearly cause for concern because discourse communities are the ends and the means of education. Insofar as distance education environments affect discourse communities, and discourse communities are the ends and means of education, distance education environments affect the ends and means of education. We need to continue dialogue on community, on precisely the kind of community into which we wish to admit our young people and on how it is that we wish to admit them. Then, we need to assess educational technology to determine its ability to serve these objectives, while being ever cognisant and vigilant not to compromise those same objectives in order to serve technology.
REFERENCE LIST


