Ethical Discourse in Online Pedagogic Environments

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Abstract

This study sought to investigate the relationship between pedagogic settings and ethical discourse types in an online asynchronous environment developed by the author. The pedagogic types were varied between Piagetian and Vygotskian settings and the Discourse types were analysed in terms of Habermas' Practical Discourse and Rorty's Ironic Discourse. It was motivated by the ongoing debate between 'cyberenthusiasts' and others regarding the democratising potential of interaction on the Internet.

The research employed experimental and qualitative approaches in its design and analysis. A theoretically generated sample was drawn from postgraduate students studying at the Institute of Education, University of London. Pre-task and post-task interviews were conducted in the form of semi-structured clinical interviews. The online environment consisted of participant profiles, reviews of media texts and message-boards, all employing a user-centric structured. The focus for ethical discussion was a media text of the participant's choosing and the resulting online interaction was analysed using indicators drawn from the literature, to try to establish any relationship between pedagogy and discussion types.

The author findings point to a correspondence between interaction in Piagetian settings and Practical Discourse and interaction in Vygotskian settings and Ironic Discourse. However, the author advises caution with respect to these findings, which are problematised in terms of their validity, reliability and generalisability. The nature of any pre-existing peer status and interaction was found to be critical to online interaction. The author generated a number of simple models for analysing the online educational interaction and the limits of current models of CMC environments are also highlighted. Finally, the author points to future research possibilities and current related work.

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Table of Contents

1 Introduction

This research is an experimental study using qualitative methods to investigate the relationship between pedagogic settings and ethical discourse types in an online asynchronous environment developed by the author. The pedagogic settings vary between broadly Piagetian and Vygotskian approaches and the ethical discourse types vary between Jurgen Habermas' Practical Discourse and Richard Rorty's Ironic Discourse.

These ethical discourse types stand in relation to an ongoing debate regarding the democratising potential of the Internet that serves to motivate this study. Those who might be termed 'cyberenthusiasts', see the Internet as offering the potential for realising an Enlightenment form of rational political interaction. Others are either pessimistic regarding the potential of technology to fulfil this role or argue that online interaction does indeed provide a democratising platform, but that this is characterised more by postmodern, rather than Enlightenment interaction types.

This study will align these positions regarding online democratisation with ethical discourse types as a means of providing a theoretical framework for analysing online interactions. The 'cyberenthusiasts' position will be aligned to Habermas' Practical Discourse and the postmodern position will be aligned to Rorty's Ironic Discourse. Issues of pedagogic authority and the development of values will be problematised so as to generate the research hypothesis, thus:

A Piagetian approach to pedagogy will encourage a more modernist form of ethical discussion, as characterised by Habermas' Practical Discourse and a Vygotskian approach will encourage a more postmodern form of discussion, as characterised by Rorty's Ironic Discourse.

The first chapter, the Literature Review, will survey the relevant literature in three main areas. The first will look at the formation of values in online environments and map out the positions and issues regarding the democratising potential of the Internet and reasons why it would lend itself to such democratic interactions. The literature will then survey approaches to ethical discourse and values formation, outlining Habermas' and Rorty's approaches in more detail, as well as the issues regarding the pedagogic settings. The I will discuss values formation in online learning environments, outlining the Piagetian and Vygotskian learning processes and the design principles for their corresponding online settings, making use of the relevant literature on Computer Mediated Communications (CMC).

The second chapter is a discussion of the methodology used, including issues regarding the sampling strategy and the data collection techniques. It will also set out the rationale for the design of the online environment and will describe the tasks and pedagogic settings in more detail.

The third chapter is the analysis of the pre-task interviews. I will look at the participant's experiences with technology, ethical analysis and discussion and the analysis of media texts. I will also look at their expectations of change of ethical position and learning generally.

The fourth chapter is an analysis of the empirical intervention. I will seek to draw out how the participant's constituted themselves online. I will also analyse their reviews of media texts and the ensuing discussions, with a view to providing a first answer to the research question.

The fifth chapter analyses the post-task interviews. I will seek to learn to what extent the participant's expectations were met. I will also look at how the participant's related to each other as well as to the online interface. I will map out how the compared asynchronous interaction to other means of communication and draw out the critical success factors.

The final chapter is the conclusion. I will provide – and problematise – an answer to the initial research hypothesis. I will highlight the importance of peer relations, draw out some of the limitations in the models of CMC interaction used and outline some of the critical success factors. I will reflect on some methodological and design issues (with the benefit of hindsight) and point to future and related work, including that of fellow MA ICT in Education students.

2 Literature Review

2.1 The Formation of Values in Online Environments

2.1.2 The Democratising Potential of Online Interaction

In 'A Declaration of the Independence of Cyberspace' (the 'Declaration'), John Perry Barlow (1996, Online), on behalf of the Electronic Frontier Foundation (and 'Netizens' everywhere, it would seem) sets out a clear distinction between what he calls the old world of "flesh and steel" and the new world which is the "home of the Mind". He aligns the former with the 'tired' governments and corporate bodies of the physical world (of atoms) and the latter with a vibrant new frontier spirit[1] of the electronic world (of bits), and warns the old world not to encroach on the new: "You are not welcome among us. You have no sovereignty where we gather." (ibid, p. 1).

This 'Declaration' may leave a lot to be desired in academic terms (although it hardly seems intended for an academic audience) and may perhaps be a little over-enthusiastic (in the nicest possible 'Californian'[2] sense). But the rhetoric employed would seem to have a basis in broadly Habermasian notions of an emancipatory public sphere of mutual understanding and it's relation to an oppressive movement that seeks to dominate, rather than to understand (Eubanks, 1999, p. 7, Online and Underwood, 2001, pp. 5-6, Online).

> "We are forming our own Social Contract. […] We are creating a world that all may enter without privilege or prejudice accorded by race, economic power, military force or station of birth. […] where anyone, anywhere may express his or her beliefs, no matter how singular, without fear of being coerced into silence or conformity. […] The only law that all our constituent cultures would generally recognize is the Golden Rule."
>
> Barlow (1996, p. 1, Online)

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[1] For an analysis of the mythography of representations of online interaction, see Eubanks (1999, Online)

[2] See Barbrook, R. and Cameron, A. (2001, Online)

The enthusiasts, it would seem, are creating, or at least are well on their way to creating, a Habermasian Ideal Speech situation (defined below), recognisable by free and equal participation, an uncoerced consensus, and even employing what might be construed as Habermas' Discourse Ethics (defined below), descended from the Golden Rule.

This enthusiastic alignment of technology with emancipation is problematic though, on a number of points. Habermas himself is highly critical of the role that technology plays in inhibiting any move to establish a public space characterised by the pursuit of common understanding, rather than controlling the world (Feenberg, 1996, p. 2, Online). Work (*system*), is success-oriented, aimed at purposive-rational action, whereas everyday interaction (*lifeworld*) is understanding-orientated, aimed at cooperative, communicative action (*ibid*). Technological development, being the substitution of human limbs by machines (for work), is recruited by *system* in its efforts to colonise the *lifeworld*, which, according to Habermas, is the central pathology of modern societies (*ibid*). This technological colonisation of the public sphere facilitates rationalisation "…the extension of the areas of society subject to the criteria for rational decision" (Habermas, 1968, p. 81, quoted in Lambert, 1995, p. 1, Online). Thus, the criteria of efficiency becomes the overriding benchmark of interaction (Feenberg, 1996, p. 3, Online), which is "…why in modern societies the process of democratic decision-making about practical problems loses its function…" (Habermas, 1968, p. 105, quoted in Lambert, 1995, p. 1, Online).

Thus, we have a clear opposition between Habermas and those who would recruit Habermasian notions, an opposition that turns on the role of technology. The enthusiasts promise a realisation of (one could say, modernist or Enlightenment) ideals of democratic participation online, whereas Habermas offers no such optimism. Yet they are both relatively uncritical of the particular (and similar) notions of democratic participation they employ – of a public sphere – and this is where another source of criticism of the 'cyberenthusiasts' arises.

Habermas defined the public sphere as "…a domain of uncoerced conversation oriented towards a pragmatic accord." (Poster, 1995, p. 5, Online). In the 'Structural Transformation of the Public Sphere' (1962, translated 1989), Habermas traced the decline of the democratic public sphere from the seventeenth and eighteenth centuries through to the twentieth (Poster, 1995, p. 5, Online). This public interaction took place in spaces from the village Church and coffeehouse to the union hall and even the street corner (Poster, 1995, p. 4, Online). It was the space in which critical, rather than instrumental reason might prevail, "a homogenous space of embodied subjects in symmetrical relations, pursuing consensus through critique of arguments and the presentation of validity claims" (*ibid,* p. 6).

Poster claims that this kind of interaction is "systematically denied in the arena of electronic politics" (*ibid,* p. 6). Referring to Usenet newsgroups (the prototypical 'open' bulleting board), Poster notes that although participants may address each other as equals, rational debate would be very difficult and consensus perhaps impossible (Underwood, 2001, p. 6, Online). On the Internet, identities shift and this inhibits the formation of stable political communities, leading not to a consensual view, but in fact to a proliferation of views (*ibid*). But while Poster would agree with Habermas (and disagree with the 'cyberenthusiasts') that the kind of democratic intercourse characterised by communicative rationality is impossible on the Internet, he does not think democratic exchange itself is impossible (in this sense disagreeing with Habermas and agreeing with the enthusiasts) (*ibid*).

Poster sees the kind of public sphere that has emerged on the Internet as characterised by "constant struggle for hegemony", as in fact consisting of several and overlapping public spheres: "…what constitutes the public interest shifts under the influence of struggle…" (Underwood, 2001, pp. 6-7, Online). What is new, according to Poster, is not that political discourse is being mediated by electronic means, but that the electronic infrastructure now allows "new forms of decentralised dialogue […] new individual and collective 'voices' […] new building blocks of political formations and groupings" (Poster, 1995, p. 7, Online). Indeed, for Poster, the Internet "appears to promote a

decentralization of discourse if not democracy itself" (*ibid*) and promotes a 'democratization' of subject constitution by radically decentralising the apparatuses of cultural production (*ibid*, p. 8). Poster thus considers the Internet to be a postmodern technology and the political public discourse that takes place on it, a postmodern exchange.

2.1.2 Political Interactions Online

There are a number of reasons why ICT researchers see Computer Mediated Communications (CMC) environments as offering a 'democratisation' of exchanges approximating Habermas' Ideal Speech (McConnell, 1994, & Wegerif, 1998). Interactions are delayed, allowing time for reflection and there is no need to 'wait one's turn' or to interrupt others. There is also less sense of 'group' (audience) compared to physical settings There is less bias and prejudice (Wegerif, 1998) and thus less anxiety about offering ideas in the public domain, encouraging participants to experiment with ideas and to engage with multiple groups if they so wish (McConnell, 1994). McConnell also claims there is less hierarchy, especially as it is easy to ignore those in authority online, and that CMC environments allows for active listening without the pressure of participation (McConnell, p. 73), although it is less clear just how beneficial all these characteristics are. According to McConnell, one should expect greater total effort of groups online, compared to face to face settings, as well as more divergent, less protocol bound discussion. However, Wegerif (1998) also notes the downside of CMC environments that act against its construction as an 'Ideal Speech Setting'. These include technical differences between users, lack of facial expression and overly long pauses between messages. Wegerif also feels that understanding is acquired less through critical reflection and more through accumulation.

There are a number of properties of online environments that are seen as providing a useful platform for political participation and values formation. Buckingham Shum & Sumner (1998) draw out the qualities of a 'good' online debate, in attempting to go 'beyond' the standard model of publishing (*ibid,* p. 139). 'Good' debate, for Buckingham Shum and Sumner, will be encouraged

by an environment that supports certain characteristics. The participants should firstly be open to multiple perspectives and informed by relevant evidence and resources. The environment should allow participants to respond quickly enough to support dialogue. Participants should be able to offer carefully constructed responses without being pressured and which build on each other, which is achieved by utilising multiple threads to avoid confusion. The dialogue should finally be preserved, to provide a valuable trace of how the end result came to be.

2.1.3 Aligning Democratic Potentials to Values Discourse Types

A number of political positions have so far been outlined with regard to the potential of online interactions to perform a democratising role. In spite of Habermas' pessimism with respect to the oppressive nature of technology, various 'cyberenthusiasts' take inspiration from his notions regarding the public sphere and ideal speech, in an attempt to pursue an Enlightenment form of rational democratic exchange, online. This position has been criticised by some as an impossible, or at least very difficult ideal, outlining instead a postmodern form of democratic online interaction as more appropriate.

The question arises as to how one can recognise these alternative positions in actual online interactions. I propose that if we align these positions (which focus on the kinds of political interaction afforded by the Internet) with positions which focus on kinds of values discourse, then we have a set of ready-made indicators. Thus, we now turn to two forms of values discourse, which I take to represent alternately the modernist and postmodern approaches – Habermas' Practical Discourse approach and Rorty's Ironic Discourse, respectively. While the choice of Habermas may seem quite natural, given the discussion so far, the same might not be said for Rorty. Here, for lack of space, instead of arguing for the validity of this alignment, I can only declare the assumption being made – that Rorty's Ironic Discourse can be aligned to Poster's and other postmodern positions regarding the online public sphere.

2.2 Approaches to Ethical Discourse and Values Formation

2.2.1 Habermas' Practical Discourse

One of Habermas' concerns is to produce a defence of philosophy as the guardian of reason and to show how we can validate moral norms. He does this by attempting to "reformulate Kant's ethics by grounding moral norms in communication"[3] (Habermas, 1990, p. 195). His validating principle is stated thus:

> "Only those norms may claim to be valid that could meet with the consent of all affected in their role as participants in a practical discourse"
>
> Habermas, 1990, p.197

A Practical Discourse is one in which all participants freely accept or reject a norm based upon examining the consequences of its full implementation, and as such, is a consequentialist ethic. This immediately raises problems regarding the limits of what we *can* know of such consequences, given an increasing complex and rapidly changing society. The observance of the ethical principle, however, is not consequentialist – it is deontological; it is an ethical principle we must follow regardless of the consequences. It is also a cognitivist ethic; it produces debatable statements – speech acts as truth claims about the world - rather than referring to personal emotions or preferences. Discourse Ethics provides a rule with which to validate norms (making it a formalist ethic), and claims universality (applicability to all times and places).

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[3] Peters (1978) notes four approaches to providing philosophical grounding to ethical prescriptions. Intuitionism, which is non-rational and 'autonomous', appeals to objectivity in a fashion similar to mathematical axioms. Naturalism appeals to man's innate nature – in this case rationality – and argues that those activities are best which satisfy more fully that nature. Emotivism argues that Intuitionism's appeal to objective, non-rational 'axioms' actually results in arbitrariness, but that this is no bad thing since actually, rational justification of ethical principles is impossible. Statements of ethical values are just like tastes, or commands, expressing little more than approval and encouragement to actions, that is, "A moral judgement is a sophisticated sort of grunt" (p. 109). Kantian ethics tries to show that certain moral principles are necessary for a moral form of discourse to have meaning and that avoiding

The Practical Discourse has certain procedural requirements of interest in that they should allow us to identify a discourse as more or less along Habermasian lines. All participants in a Practical Discourse take part freely. They operate equally and co-operatively (avoiding strategic competition) and are only coerced by the better argument. They are all rational individuals, each with a right to disagree, with an equal opportunity to contribute and a requirement to overcome their egocentricity. These operational requirements are taken to be *always already* in use in argumentative speech and hence provide what Habermas calls a Transcendental-Pragmatic argument for Practical Discourse (p. 87). Habermas sees Kohlberg's theory of the development of moral judgement as a candidate for providing confirmation of Discourse Ethics. Kohlberg argued that the highest stage of what he claimed was an invariant pattern of development was a broadly Kantian morality based on universal ethical principles. However, Habermas' Practical Discourse is an ideal position; it is not clear that any group of people will ever be free, equal and rational enough not to coerce or be coerced, as the requirements demand.

2.2.2 Rorty's Ironic Discourse

Unlike Habermas, Rorty does not consider philosophy to be the guardian of anything apart from it's own particular way of speaking. He wants to show, however, that such a sceptical attitude is still consistent with a broadly liberal political philosophy, without privileging the private over the public realm, or vice versa. For Rorty, "Truth is replaced by Freedom as the goal of thinking and social progress" (Rorty, 1989, p. xiii) and such questions as "what is it to be a human being?" are replaced by "what does it mean to inhabit a rich, twentieth-century democratic society" (*ibid*). Thus, Rorty is a historicist. He advises that we should accept the unending contingency of human nature and all our most central beliefs. Public solidarity can be achieved not by ethical principles – by inquiry or reflection aimed at removing prejudice and achieving objectivity – but by exercising the imagination to see and describe others in

moral discourse would be impossible for anyone initiated into our society (p. 116) (that is, that these principles are Transcendental). This ethical theory is perhaps best represented by Habermas today.

new ways, particularly as fellow sufferers, susceptible to humiliation. Cultural change is a change of vocabularies, claims Rorty, and this is achieved through "a talent for speaking differently, rather than arguing well" (*ibid*, p. 7). The history of moral theory (as well as art and science) is the history of poetic metaphors, rather than the history of language achieving an ever closer approximation to 'reality'.

Ethical discourse traditionally presents paradigm cases of what it means to be good or bad, right or wrong, true or false. This is the 'common sense' method of ethical justification. 'Good', 'bad', 'right', 'wrong' etc are all 'thin' words in our Final Vocabularies (those words which are our ultimate linguistic recourse for justification). Paradigm cases of these 'thin' words are 'thick' words, such as 'church', 'state' and 'rigorous' and these are nothing but metaphors. Beyond the common sense method is the Socratic approach that seeks to uncover a metaphysical essence behind the meaning of such thin words (*ibid, p. 74). Rorty avoids both the common sense and metaphysical approach by employing ironic redescription; simply swapping one set of thick words, or metaphors, for another. Metaphysical (Habermasian, for example) discourse is logical, performing inferential operations on propositions. Rorty's Ironic discourse is dialectical, performing redescriptions on vocabularies.

Morally relevant texts, for Rorty, simply mean texts that explore what is possible and important. Ironically relevant moral texts are those texts continually engaged in the production of thick words, and these are more likely to be found in literature and media[4] than in systematic philosophy. Rorty

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[4] According to Best (1999, p. 221) moral considerations clearly arise in literature, film and music. One can take a morally purposive approach to the value of art, as exemplified by Tolstoy, who claimed that the value of art lies in the purpose it may serve in the life of man. One can also take what Best calls an autonomist view, exemplified by Oscar Wilde, that "the sphere of Art and the sphere of Ethics are absolutely distinct and separate" (p. 222). Best reconciles the two positions by arguing that there can be moral meaning in, while not being the purpose of, many works of art (p. 227), giving examples such as "Schindler's List", "Apocalypse Now", "The Deer Hunter", "Land and Freedom" and "Secrets and Lies" (p. 335). The arts, for Best, can bring home to us the force of moral dilemmas, because moral learning is not exclusively about the acquisition and application of moral principles.

This view of the relation between moral learning and moral principles directly contradicts that of Kant and Piaget. While Kant outlined the structure of cognitive concepts and categories, Piaget mapped the stages at which they developed (Peters, 1978). Hegel and Marx were aware of the social aspect of the mind, of questions relating to the extent to which, as Peters puts it, the mind is a product of "initiation

finds little use for rational discourse. Instead, students should concentrate on the development of the imagination and on methods for conveying the products of one's imagination. Whereas Habermas might encourage us to 'know why', Rorty simply wants us to 'know how' (Paul, 1997, p. 217).

2.2.3 Philosophical Models of Values Formation

Given the desirability[5] of values education, ethical discourse and moral positions can vary along a number of dimensions of which Oser (1986) has enumerated seven. These are subjective-objective, relativist-universalist, 'positive' education-indoctrination, normative-descriptive, rational-emotional, structural/theoretical-content/practical and moral view-moral neutrality. Whilst some of these dimensions clearly fit better together than others, it would perhaps be a mistake to draw a clear dichotomy of positions and relate them to opposing philosophies. However, we can use these dimensions to provide one description of a Kantian approach, Habermas' for example, as objectivist,

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into public traditions enshrined in public discourse" (p. 49). This seems to be a very neo-Vygotskian approach to the formation of mind, although Peters doesn't refer to the Russian psychologist.

[5] One argument for the desirability of values education rests on the nature of the society in which this form of education is proposed. A society characterised by pluralism and democracy, the argument goes, would require particular types of participation and levels of tolerance different to a society characterised by relative homogeneity, an emphasis on tradition and a more hierarchical social and political ordering. The latter kind of society would not need to be so demanding of critical reflection by it's members for 'goodness' is to be achieved. There would be fewer alternative value systems available for society's members, (due to homogeneity), less doubt about what to do, (due to tradition), and fewer choices would need to be made by the individual (due to relative heteronomy). In the former society however, a diffusion of alternative value systems, cultures and lifestyles, as well as greater doubt over one's choices, for which one is ultimately responsible, would seem to require a more critical form of reflection, with respect to these value choices. It is precisely to foster knowledge, understanding and critical reflection of the various positions that (such an intellectually challenging form of) values education is required. (Haydon, 1995, p. 54).

The need for critical reflection in this pragmatic argument clearly depends on the form of society one is in, yet it is not clear how we are to decide exactly what society we are in. It may perhaps be simplistic to say that our culture is either more or less plural and democratic, since we each inhabit many, varied cultures, which we continually move in and out of. Are we then to alter our critical disposition depending upon the sub-culture we find ourselves in? Unfortunately, this argument does not provide an answer.

Another argument for the desirability of values education argues from Durkheim's position that society cannot negotiate, but only transmit certain core values, like the protection of life, procedural forms of democracy and the dignity of persons (Oser, 1986). This transmissive approach is clearly at the expense of a vision of a more critical, active moral agent. A cognitive constructivist would also take issue with the distinction drawn between transmission and negotiation – perhaps the best way to transmit socially arbitrary ideas is to have the receiver actively construct them in a process of social negotiation.

universalist, normative, rational and structural. We might also describe a Postmodern approach, Rorty's for example, as subjective, relativist, descriptive, emotional and content-based/practical.

Oser goes on to make a distinction between values education and moral education. For Oser, the former refers to values clarification of individual preferences which are determined by the social system. The latter refers to a Kantian justification of objective principles that are universally understood and accepted. Emberly (1994, Ch. 7) makes a similar distinction when comparing the ethical models of Kant, Hegel and Nietszche as values education, values development and values clarification, respectively. This distinction is useful in that it provides us with a rough philosophical map within which to locate ourselves and categories with which to analyse the research findings.

2.2.4 Psychological Models of Values Formation

Whilst Piaget attempted to describe the formation of autonomous moral thought, Kohlberg was more concerned with describing the features of such thought (1981). However, his later work, such as the notion of the 'just community', did approach that of Piaget, in it's concern with equality (Kavathatzopoulos, 1991). For Kohlberg and Piaget, moral autonomy was the highest stage of moral development. The lower stage was known as the Preconventional Level and consisted of obedience based on fear of punishment and on the pursuit of individual instrumental purposes (Habermas, 1990, pp. 123-125). The next stage – the Conventional Level – was based on mutual interpersonal expectations and on the maintenance of one's conscience. The Postconventional Level was the highest and consisted of the recognition of prior rights, social contract or utility and beyond that, (the point of moral autonomy), on universal ethical principles, which was rarely achieved.

Such a coherent psychological model of moral development clearly has implications for teachers[6]. However, this characterisation was effectively challenged by Gilligan (1982), who studied how women reacted to and resolved moral dilemmas. Gilligan noticed that women tended to resolve dilemmas in ways that would have been judged by Kohlberg as not fully developed[7]. The reason for this, Gilligan argued, was not because women were not as fully morally developed, as men, but because women had been left out of the 'critical theory-building studies of psychological issues' (Sichel, 1985, p. 150). Kohlberg had simply failed to take them into account. For Gilligan, men and women simply speak different languages[8]. Men speak a

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[6] Where discussion around value systems features prominently, there seems to be a correlation between the level of student participation and the centrality of the teacher's role (Harwood, 1997). Harwood found that where teachers were mostly in a central role, this was accompanied by low student participation in discussions, whereas where the teacher acted as a chairperson, verbal communications around the topic were elaborate and extended. This study was in relation to a 'world studies' program and it may be that discussions focussed on ethics may behave differently, especially if the student-participants feel that ethics has a greater objective content, that is, that there are 'right' and 'wrong' answers 'out there' to be discovered.

The importance of the role of teachers is also investigated by Mills (1997), who highlights the need for teachers to 'create a space' for "discourses of resistance", by which he refers to a particular episode when students attempted to implement social justice in their school. He notes also the supportive political institutional context and the motivation of the students to "step into" the spaces opened up to them by the teachers as necessary factors. This he calls a "disruptive pedagogy" and points to Foucault's view of discourse (as that which transmits and produces power) to provide a framework for this approach.

Oser argues that it is the task of teachers to create what Habermas calls the 'ideal speech' situation (Oser, 1986). This is a situation in which all members participate equally, are assumed to be truthfully engaged in an attempt to construct a just solution and seek the solution with most justice and care. By this method, claims Oser, values education remains a cognitive activity which appeals to human freedom and activity and which avoids indoctrination. Teachers should be encouraged, according to Oser, to direct the moral discourse in particular ways. Ethical discourse should be directed to the moral conflict, to role-taking and empathy, to choice and action, to shared norms, to the analysis of value systems, to the student's own reasoning and finally to theoretical knowledge. Again, this is derived from Habermas and as such is clearly Kantian in origin. Thus it is a very particular, though coherent and popular, approach to values education which emphasises reason and interpersonal understanding (culminating perhaps in an agreed consensus).

[7] Vreeke argues that Gilligan, who provided a thorough criticism of Kohlberg's model of moral development, might perhaps be placed in an expanded Piagetian framework (1991, p. 34). Gilligan sees herself in the neo-psychoanalytic tradition. She attempts to address two important aspects of the human condition – inequality and attachment. In comparing justice and care as parallel ethical stages, or styles, Gilligan notes that care derives from a self-conception of connectedness and justice with a self-conception of separateness. Thus, when interpreting moral problems, justice highlights the conflict between claims, especially the rights and duties of individuals and hence is atomistic. Justice uses content-free rules, standards and principles. Care, however, is relational, emphasising tensions and resolutions in relationships between people. It employs context-relative reasoning rich in content and description.

[8] Turkle proposes an approach to reasoning that does not privilege the structured, algorithmic and abstract over the 'tinkering', contextual style of the 'bricoloeur' (1997, p. 58). She refers to Gilligan's

language of rights and justice and women of care and responsibility. Men treat moral agents like variables in an equation while women see each moral situation as unique and are more context-sensitive. Further, women have their own stages of development – first care for the self, then care for others and finally care for both self and others in a recognition of mutual interdependence.

Haydon (1999) argues that Gilligan's model of caring is one of altruistic morality, and as such doesn't guarantee justice, which is necessary within communities. Context sensitivity and caring means caring towards particular others, whereas following principles of justice ensures everyone's needs are met. However, Haydon also argues that the concreteness of an ethic of care is important in that it requires that we think through our actions carefully, rather than blindly and algorithmically following through on substantive moral rules (Haydon, 2000, p. 28).

2.2.5 Pedagogy, Values and CMC

Gergen maps a distinction between 'hierarchical' (top-down) and 'appropriational' (bottom-up) modes of education (1995, p. 14). The first approach places knowledge producers (researchers) at the top and students at the bottom, with teachers 'dispensing' educational 'nutrients' which the students consume. The professional discourse is monologic and uni-directional, which invites only clarification, not conversation. The second approach seeks to "re-embed the professional discourses onto local contexts and relationships" (p. 17) and views knowledge as a resource for unbounded appropriation. This involves teachers engaging in research and students as curriculum designers, being provided 'free-space' to select, appropriate and modify the discourse as necessary.

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criticism of Kohlberg, as validating bricolage as an approach to moral reasoning that is mature and useful, and simply an alternative style to Kohlberg's abstract principles-based reasoning, rather than a lower stage in itself. Along with bricolage, Turkle also describes the practice of working "close to the object", that is, to become 'one' with the object of study, as opposed to the formal, hard methods of 'traditional' science, (which seeks to maintain or impose a subject-object dualism).

Technology has a major role to play in this relativisation of knowledge according to Gergen. "[Networking] Technologies serve to expand, complexify and enrich the potential for social connection." (*ibid*, p. 2) and this expansion leads to 'social saturation' – communicative connection with an enormously expanded domain of others. We are thus exposed to an increasing range of values and conventions. Group consciousnesses emerge facilitated by our new found ability to locate and organise like minded people, which then form a source of moral grounding for those same values and conventions.

This relativist conception of pedagogy, values and technology is a problem if one accepts a model of knowledge as the possession of the individual mind, and this in turn is the result of comparing mental representations to external conditions (*ibid*, p. 4) (to seek a correspondence). For Gergen, truth is relative to a particular community, or due to inter-community exchange. Thus Vygotsky's ZPD plays a critical role in a social account of the learning process, although Gergen complains it is still to individual, in that it still relies on what Rorty calls a 'Glassy Essence' (the individual 'Mind') shaped by and reflecting the external world.

2.2.6 The Research Hypothesis: Aligning Values Discourse to Pedagogy

A number of approaches have been outlined above with respect to ethical discourse as indicators of the democratising potential of online interactions. Habermas' Practical Discourse seeks to describe interaction that emphasises free and equal participation with the aim of a rationally agreed consensus. Rorty's Ironic Discourse recommends that we use our imaginations to speak differently rather than to argue well, with the aim of redescribing one set of ethical words for another.

Further, the different psychological positions of Kohlberg and Gilligan served to problematise the question of how we view moral development. Without the critique of Kohlberg's model, it would have been much more difficult to accept a postmodern approach to ethical discussion as being as valid as the modernist Enlightenment position represented here by Habermas. Gergen

highlights the role that online technology has to play, by expanding social connections, altering pedagogic relations and forming new sources of moral grounding.

Hence, we can see that the particular pedagogic setting should not be taken as given, when considering ethical discourse, particularly in online environments. Different pedagogic approaches will bring with them different frameworks for constructing relations of authority and different end-points in terms of development. I want to argue in this thesis that these different pedagogic frameworks promote different types of ethical discourse and hence correlate with particular positions regarding the democratisation of online interaction. I propose that:

A Piagetian approach to pedagogy will encourage a more modernist form of ethical discussion, as characterised by Habermas' Practical Discourse and a Vygotskian approach will encourage a more postmodern form of discussion, as characterised by Rorty's Ironic Discourse.

The Piagetian setting, broadly constituted below as one of equality will be operationalised by requiring the participants to examine a single media text which they are both familiar with. The Vygotskian setting, broadly constituted below as one of hierarchy, will be operationalised by requiring the participants to examine different media texts, each of which will be familiar to one partner and not to the other. The author believes the setting that highlights equality will generate requirements for justification, conflict and rational interaction, broadly consonant with Habermasian Ideal Speech and the setting that foregrounds hierarchy will generate requirements for apprenticeship, modelling and uncritical imitation, thus being more consonant with Rorty's edificatory Ironic Discourse.

2.3 Values Formation in Online Learning Environments

2.3.1 The Piagetian Learning Process

Individuals engaging in social processes[9] as peers, internalise cognitive processes that are implicit in social interactions, like verification, planning strategies and symbolic representation (Damon, 1984). Doise (1992) carried out experiments involving spatial coordination and conservation – both standard Piagetian tasks. These experiments demonstrated the ability of groups to perform cognitive tasks that individuals alone could not do and also that symmetric nonconservers could become conservers after discussion centring on the cognitive task.

Light (1985) provides a framework of interactions in terms of the degree of active participation of the peers. The first level of interaction is one of peers modelling each other. The second level demonstrates more active intervention and the final level is of full cognitive dissonance and contradiction and Light notes Piaget's (1932) observation that peer interaction will decentre their thought processes, causing them to actively seek a resolution of this conflict

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[9] While Mercer (1997) claims that Piaget gave only a marginal role to language, culture and social interaction, Borke (1978) argues that in fact, Piaget held the social environment to be as important as the physical environment in cognitive development. Indeed Piaget saw social interaction as the trigger of cognitive change, whilst new knowledge still resulted from solitary reflection only (Damon, 1984). Aebli (1987) sees Piagetian learning as more conservative and reactive than Damon and Aebli argues that while social interaction is the trigger of change, the change itself is an autonomous activity, although it is hard to see how this differs from the solitary reflection described by Damon. For Aebli, this accounts for a more proactive form of learning, led by curiosity, rather than a more conservative, reactive learning, moulded by environmental conflict, which he attributes to Piaget.

Doise (1992) claims the relationship between the individual and their social environment, described by Piaget, is more complex than simple triggering. For Piaget, the structure of intellectual operation is identical to the structure of social interaction involving values and the exchange of ideas (p. 202). Piaget held that social and the cognitive relations developed in parallel, in contrast to Vygotsky who argued in his General Genetic Theory of Cultural Development that social relations (the inter-mental) always preceded the intellectual relations (the intra-mental) (Wertsch, 1985, p. 60).

For Piaget, social interaction is one of the three influences on development, along with interaction with physical objects and maturation of the nervous system (Richmond, 1970a, p. 83). These social factors include language, beliefs and values, forms of reasoning and social relations. Piaget held that the mind has the same structure as the social environment and that cognitive development would not be possible without social interchange of thought. Murrey (1982, p. 268) also holds that for Piaget, social interaction is critical to the transition to operativity, although Russell (1992) claims to find no evidence

(this resolution does not necessarily mean consensus), rather than to passively model others. However, as Aebli points out (1987), we seem very happy to live contradictions, so it is difficult to imagine conflict as a sufficient condition of learning, which may be what Piaget seems to be implying.

Learning occurs, for Piaget, as a series of adaptations of the mind to its environment. This process of adaptation consists of assimilation and accommodation and Piaget saw the mind as a dynamic system, achieving stability through such flexible adaptation, (Richmond, 1970a), which results in a more abstract, inclusive mental structure. For new experiences to have any meaning we need to apply past experience (assimilation) and for past experience to have transferability, it needs to be adjusted to the present (accommodation). For Piaget, all learning requires both application and adjustment of past experience, both assimilation and accommodation. Individuals interact with the social environment in a process of greater adaptation, and co-operation in peer groups requires decentreing, the interchange of ideas and the chance to experiment socially[10] (*ibid*).

Borke (1978) highlights three movements resulting from social interaction. The first is the move from egocentricity to reciprocity, where the individual recognises the equal importance of alternative points of view. The second is the move from absolutism, where each perception is regarded as a separate and independent entity, to relativism, where each concept is thought of in relation to each other. The thirds move is from subjectivity, where everything

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that social interaction, in the form of Piagetian conflict, stimulates change. However, he concedes that this may be explicable in Piagetian terms, as due to egocentricism and social dominance.

[10] Wegerif and Mercer (1997) compare two views of reasoning – monological and dialogical. Monological reasoning is exemplified by Piaget and Vygotsky and is a model of reasoning emphasising individual activity – adaptation in the case of Piaget and internalisation in the case of Vygotsky. Wegerif and Mercer argue that this model doesn't go far enough and offers Habermas' Ideal Speech Situation as a dialogical alternative. It is dialogical in that in Ideal Speech, being rational means "making appropriate, clear and useful contributions to discussions" (ibid, p. 53), affording a discursive construction of meaning (ibid, p. 52). They go on to generate a number of useful categories of this social mode of thinking. Disputational talk is defined as talk centring on disagreement and individual decision-making. Cumulative talk focuses on participants building positively but uncritically on each other. Exploratory talk is when partners engage both critically and constructively with each other, and is described as a situated model of reasoning (ibid, p. 59). It requires a "consistent state of detachment" which manifests itself not as being consistently non-biased, but by being perpetually open to alternative perspectives.

originates from the self, to objectivity, where things are external and observed by everybody.

Light (1985) notes that performance enhancements resulting from social cognitive conflict are not limited to any age or developmental stage.

2.3.2 The Vygotskian Learning Process

Vygotsky held that "any function of the child's cultural development appears twice, or on two planes…the social plane then the psychological plane…", also known as his General Genetic Law of Cultural Development (Wertsch, 1985). By "cultural development" Vygotsky meant higher mental functions[11], or consciousness, since he considered lower mental functions, like sensori-motor activities, to occur naturally, that is, without social intervention (*ibid*, p. 63)[12]. This is in contrast to Piaget, who held that development occurred according to stages, (for example the sensori-motor stage), which were crucial to cognitive development. For Vygotsky, internalisation was a process of making the external, internal, and external was defined by him as semiotically mediated social processes[13] (*ibid*, p. 62). As Leont'ev, a colleague of Vygotsky, asserted, consciousness was not given from the beginning, rather it

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[11] Higher mental functions included memory, attention and self-regulation for Vygotsky (Samaras & Gismondi, 1998, p. 716). Cognition - learning, thinking and knowing - arises through social interaction (collaboration) with others, in a situated model of learning in which "understanding and experience are in constant interaction – are indeed mutually constitutive" (Lave and Wenger, 1991, pp. 51-52).

[12] Bruner draws a parallel between Luria's study of Central Asian peasants and Vygotsky's conception of development (Bruner, 1984). For Luria's peasants and Vygotsky's children, development was the result of an active intervention by another, more expert agency, either instructors or peers. Vygotsky's theories, for Bruner, are a fusion of Marxist ideas on collectivism and consciousness – those with higher consciousness were to share with those with less developed consciousness. But this was not intended to limit the individual's spontaneity, the development of which would in fact be the result of society providing the child with symbolic tools. Language is just such a tool, an "historically conditioned instrument" that would change the way the mind actually worked. This view of instruction sits well with general Twentieth century attitudes to social conscience and is one reason for the popularity of Vygotsky but according to Gillen (2000) this popularity is based on a highly selective, distorted and oversimplified reading of Vygotsky.

[13] Salomon (1993) offers a congruent, social perspective of thinking, where "intelligence is accomplished, not possessed". This perspective illustrates how the resources that shape and enable activity, in which intelligence is actually manifest, are distributed across people, environments and situations (ibid, p. 50). Salomon argues that thinking occurs as much among as within individuals (ibid, p. 43). An example is that of language, which "can never be created by an individual" (ibid, p. 2). Artefacts and tools act as mediators between human minds, acting as both a connector and as a store of knowledge (ibid, p. 93), shaping activity by determining what is possible and necessary (ibid, p. 50).

was a product of society. However, external for Piaget was the social *and* the physical environment.

The Zone of Proximal Development (ZPD) was, for Vygotsky, a special case of the General Genetic Law of Cultural Development. It is the region in which internalisation takes place; in which the transition from inter-psychic to intra-psychic relations are made. But there is also another sense of the ZPD as a process of instruction[14] (*ibid*, p. 70). The Zone of Proximal Development is defined as:

> …the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult supervision or in collaboration with more capable peers.
>
> Vygotsky (1978, p. 86)

The ZPD is jointly determined by the child's level of development and the form of instruction involved. For Vygotsky, "instruction …awakens…an entire set of functions which are in the stage of maturing…instruction plays an extremely important role in development." (quoted in Wertsch, 1985, p. 71).

The terminal point of development for Vygotsky is not clear (Wertsch & Sohmer, 1995, p. 335). The first possible end-point is a form of abstract, Enlightenment rationality and represents "the semiotic potential of decontexualisation". The other possible end-point is highly contextualised and includes sense-laden mental processes such as inner speech.

2.3.3 Advantages and Disadvantages of Online Learning

McConnell (1994) notes a number of drawbacks to CMC-based learning environments. They tend to suffer from lack of non-verbal cues (except

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[14] Vygotsky has a specific understanding of learning and development, according to Wertsch and Sohmer (1995). Wertsch claims that although the word 'obuchenie' is frequently translated as 'learning', it really refers to the instruction from teacher to student, but without putting too much emphasis on the teacher. With development, each domain has different dynamics, but is characterised by the transformative effects of cultural tools upon their users.

perhaps video-conferencing) since written dialogue lacks expressive power, compared to audio-visual communication. On the other hand, there can at times be *too much* information and students can suffer from information overload (*ibid*, p. 81). Among the characteristics listed by McConnell, some can be seen as clear advantages. There is no need for physical travelling, for example, and this saves time, money and effort.

There are a number of other characteristics that are not clearly advantages or disadvantages, but might prove to be either depending on the situation. There is a different, 'weak' sense of 'time' in CMC learning environments. Scheduling is rarely required and there is often no sense of 'lateness' or 'earliness' (*ibid,* p. 73). To the student there seems to be a continuous, indefinite meeting time and this can be seen as constant pressure or as flexibility (*ibid,* p. 64).

Another characteristic of CMC-based learning is that not only is the text more structured and permanent (as opposed to physical articulation, for example), but multiple issues can be addressed at the same time, if threaded discussion is supported (McConnell, p. 73). Public feedback in turn is encouraged to be very focused and detailed, offering perhaps, other, easily accessible electronic resources for the student's benefit. Wegerif (1998) also points to the possibility for 'off-topic' meta-linguistic comments, not available in face-to-face settings, that although are explicit, self-reflective statements, don't detract from the main conversation.

The Open University (OU, 1998) offers a similar description of the advantages and disadvantages of online learning. According to the OU, online collaboration and co-operation helps ensure students (in existing distance learning courses, it should be noted) feel less isolated, which in turn increases student motivation. Students can exchange helpful ideas and all participants can access electronic curriculum materials. On the downside, the OU noted the need for training and the increased workloads, especially for the online learning moderators.

<u>2.3.4 CMC Design Recommendations</u>

McConnell (1994) considers CMC environments in terms of dimensions of synchronicity, location and structuring (*ibid*, p. 28). CMC environments can vary between highly synchronous settings, like IRC and video-conferencing, to asynchronous settings, like email and message-boards. CMC environments can also vary between highly unstructured settings, like USENET and IRC, and highly structured ones like conferencing systems, for example FirstClass[15]. In terms of the dynamics of interaction, these can also vary according to a number of parameters, such as turn-taking, patterns of interruption, choice of conversation topic and the length of exchange, all of which go toward constituting a sense of authority online.

The Open University (1998) recommends that students need to find a way to 'bond' and that, in fact, face-to face sessions should be used for this. The OU also asserts that online learning groups should appoint a co-ordinator, although clearly this is contingent on the pedagogical approach adopted. They advise that both the process as well as the end product of collaboration needs to be awarded a grade (if only to avoid the 'free-rider' problem) and that there should be a balance between the group's mark and the individual's mark in any assessment.

McConnell (1994) advises that interaction in CMC environments should be unstructured to be most effective while Wegerif (1998) asserts that interaction should move from structured to an open, unstructured style, following a situated model of scaffolded learning. Wegerif continues that students should also be provided teaching opportunities, perhaps by letting them lead discussions. Collaborative learning was the main pedagogic model in Wegerif's CMC-based course and success in that course was explained by

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[15] In Crook's examination of computer-mediated discourse during a campus wide implementation at Durham University between 1986 and 1991 (Crook, 1994, p. 205), he found that email was far more popular than computer conferencing. This, he argues, was probably due to the "interface, which many people found cumbersome". Email was seen as accessible and effective, one of the reasons being the ability of the mailing system to provide feedback on who had read which messages. It would be difficult to draw definitive conclusions from this evidence, if only because of developments in both technology and student attitudes to educational tools since the study.

the move by students from 'newcomers' to 'old-timers'. Not only should 'old-timers' be encouraged to model good online style (p. 14), but the community should also try to adopt Habermas' model of communicative rationality as far as possible; to be democratic and to seek critically grounded consensus.

Salmon (2000) provides a five-stage model of online learning, in terms of the student community's progression. The initial stage focuses on access and motivation issues and includes provision of training and passwords. This is a general infrastructural stage. The next stage is of online socialisation and tackles issues of identity and bonding among the participants. After this is the stage of information exchange, which allows for the free flow of information without users getting overloaded. Then comes the stage of knowledge construction, when students start to learn from each other. At this stage, there are few 'right' answers, rather students are given challenging tasks and are encouraged to explore and discuss issues by taking sides and arguing. The final level is one of development, when the students start to challenge the givens in the system and become more demanding. The users are at this stage experts in using online learning (*ibid,* p. 36).

Wegerif provides a similar, though less well defined, model of progression in online learning (1998). For Wegerif, success in an online course depends on the extent to which students cross the threshold from being 'outsiders' to 'insiders' and become, in Salmon's sense, more expert users, able to jointly construct knowledge and question the givens in the system.

2.3.5 Piagetian Online Setting Design

The environment that promotes Piagetian cognitive conflict (and hence cognitive development) is one in which the participants are all on the same level, at least in terms of authority, if not intellectually (Damon, 1984). It is one in which there is direct expression, that is, no word hedging, one in which any feedback is taken seriously and one that is less emotionally threatening than with adults.

Rationally successful exchange requires that parties can carry out the same operation as each other, that there is a common scale of values (Doise, 1992) and Light (1985) argues such Piagetian interaction is most effective with similar initial ability. In this environment, difficulty must be of an appropriate cognitive developmental level and dominance must be limited[16]. This is clearly not a Zone of Proximal Development as it is an environment where the participants are of the same age and status (Richmond, 1970a), although it would seem that age would be less important as the child matures.

Richmond (1970b) further describes a social group appropriate to Piagetian pedagogy as self-organised, consisting of equally contributing members, with a need to verify and justify assertions, iron out contradictions and agree on meanings. However, this view of social interaction places, perhaps, too much emphasis on objectively discoverable (rather than socially constructed) values and seems to require a view of the individual as one that *can* discover such objective values, which is, needless to say, highly contentious.

Crook offers a number approaches to explaining why and how social collaboration involving ICT can be educationally effective (1994). Firstly, even mere articulation can be effective by making thinking public and explicit, yet it is not clear if the benefits of this kind of social thinking transfer to when the student is alone (*ibid*, p. 135). Another mode of social thinking, inspired by Piaget, revolves around social conflict, (though not in the violent sense). Disagreement, especially between peers, should "prompt discursive moves of justification and negotiation", although encountering differences should be

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[16] In terms of co-operative learning, Johnson & Johnson conducted a review of various methods and their effect on school achievement, comparing them to both competitive and individual learning (Johnson et al, 2000). Their results show that compared to competitive and individual learning, their Learning Together and Academic Controversy co-operative methods were the most successful. Whilst Johnson et al provide a useful mapping of the various cooperative learning methods, the fact that this supposedly objective meta-analysis provides backing for the effectiveness of their methods should at least make one extra thorough when inspecting their results and methodology.

Slavin considers co-operative learning from the point of view of a number of theoretical perspectives (Slavin, 1995) which include motivation, social cohesion, developmental and cognitive elaboration. Motivational approaches emphasise reward and goal structures, based on the self-interest of individuals. Social cohesion approaches highlight the importance of care for the group. Developmental approaches include Vygotskian and Piagetian positions and cognitive elaboration approaches emphasis relating new knowledge to previous information by explaining the material to someone else.

enough for cognitive restructuring, that is, actual agreed consensus may not be necessary. This approach strongly counters the "common belief that Piaget denied the potency of interpersonal experience in cognitive development" (ibid, p. 136). Unfortunately, research in such environments centre on characteristically 'Piagetian' tasks, such as conservation, and are thus poor representations of 'real world' settings.

2.3.6 Vygotskian Online Setting Design

Bliss identifies three major mechanisms for assisting learners through the ZPD (Bliss *et al*, 1996, p. 41). These include modelling of the instructor by the student, contingency of management of the learning process (instructional intervention varied according to student's progression) and feedback by the instructor. The instructor uses three linguistic methods of providing assistance, which include instructing, questioning and cognitive structuring.

Scaffolding is one operationalisation of Vygotsky's Zone of Proximal Development and was developed by Bruner and others initially to characterise mother-child interaction (Wells, 1999, p. 127). What is important about scaffolding, according to Wells, is that it is increased or withdrawn according to the student's developing competence. Hence, teachers scaffold in the expectation that in time, the student will be independent. So, scaffolding enables a student to carry out a task they would not be able to do on their own, bringing the student into a state of independence and is followed by evidence of the students increased competence (*ibid*, p. 221). Samaras & Gismondi (1998) advise that for learning to become internalised, mediation of an activity must occur during actual problem solving. This mediation should include shared responsibility, gradiations of 'free-reign', structured feedback and assessments. Special attention should also be paid to the histories and experiences of the student.

The ZPD itself has a number of dimensions, listed by Wells. It is an assessment tool, used to demonstrate levels of achievement with and without assistance. As an instructional setting, it draws on Vygotsky's idea that

learning is in advance of development and that instruction should be aimed at mastery of scientific concepts. However, Vygotsky said little on the nature of appropriate instruction itself, although he did consider Montessori a good example, in that instructional activities were made meaningful and relevant to the student. It is within the ZPD that instruction is internalised, although the concept of internalisation is one of Vygotsky's most hotly contested notions[17]. Another important aspect of the ZPD is the assistance of a more expert person, or collaboration with more capable peers, although the peer does not need to be more capable in all respects. Wells claims the end-point (*telos*) of instruction in the ZPD is a more abstract and decontextualised mode of thinking, although, as we have seen above, Wertsch would disagree (Wertsch and Sohmer, 1995, p. 335)

Bonk and King (1998, p. 195) provide a useful categorisation of types of events in online scaffolded interaction. Entry level events consist of initial and repeated presentation of information. Transfer focused interactions centre on providing 'higher', unfamiliar materials and concepts as well as solicitation of metacognitive statements that illustrate understanding. Facilitative interactions provide both direct assistance, in the form of answers to 'lower-level' questions, and validation of student responses. Management interactions respond to student missteps with questions, counterexamples and counter-arguments. However, although Bonk and King here take a scaffolded approach to online pedagogy, they later note the claim by Rogoff *et al* that electronic class discussions encouraged more 'horizontal', that is, peer to peer, interaction than 'vertical', that is, expert to novice (*ibid,* p. 250). Although distinctions like "horizontal" and "vertical" are useful as a broad framework, one should perhaps be wary of such sweeping claims related to a novel setting like electronic classrooms.

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[17] Lave & Wenger, for example, propose an alternative to internalisation with their Legitimate Peripheral Interaction. Like Vygotsky, they accept that mental functions are first social then mental and that the individual moves from novice to expert, but they diminish the importance of any explicit passing of knowledge. They use the metaphor of learning to join a dance to illustrate the gradual construction of cognitive structures by the novice and the dialectical adjustment of participants to each other.

Another approach to social thinking using ICT is one of co-construction (Crook, 1994). In this setting, students take responsibility for complementary cognitive functions while solving a problem, which may be "within the context of some overall converging discussion about the task" (p. 137). Work gets "creatively dispersed" with the aim of a common objective, often narrowly defined.

3 Methodology

This was broadly a qualitative study, although some aspects are better characterised as employing quantitative methods. As such, the main focus of the analysis was concerned more with analysing the data with a view to mapping out the main themes used, rather than calculating relative or absolute amounts of types of messages, for example. Since the main requirement was not to count types of events, but rather to represent them in the form of extracts from interview and online interaction transcripts, I made use of elaborated descriptions to establish the validity of my representations (Brown and Dowling, 1998, p. 83).

3.1 Sampling Strategy

I made use of both opportunity and theoretical sampling strategies to acquire a set of suitable participants (Brown and Dowling, 1998, p. 30) which was consonant with the nature of the study which was generally interventionist and qualitative. The opportunity arose from being in contact with fellow students in the Institute of Education, from a diverse range of academic and cultural backgrounds. Logistically, this was a better strategy than looking further a field for a research sample, which would have been required if the study had focussed on a pre-university age-range, for example. The sample were all academic colleagues whom I'd met whilst on a number of different courses during the MA.

The sample had to fulfil certain theoretical requirements. An equal number of males and females were recruited, in order to reduce any gender bias, although a single gendered sample would have better for these purposes. There was also a deliberate balance between those on the ICT in Education MA and those on other Masters courses. This was to limit any pro-technology bias that might effect the online nature of the setting. Each dyad was thus

constructed as having one male and one female, one if which was from ICT in Education student and one from another MA course.

The participants were required to already have a good command of English and an appropriate level of computer and Internet literacy. This first condition I took to have been met by the entry requirements of the Institute but the second was more problematic as it required determining what constituted both an 'appropriate level' and 'computing and Internet literacy'. For these purposes, appropriate computer and Internet literacy meant the ability to use a mouse, keyboard (PC or Mac), browser and email software and to navigate web sites, which included searching and filling in online forms.

The participants were also required to have a familiarity with media texts, which had to be alternately overlapping and distinct, depending on the pedagogic setting. This meant a previous broad engagement with popular culture, mediated through film, literature, music, computer games and other computer software. Whilst the participants were not required to be experts in cultural, media or ethical analysis in any real sense, they were expected to have at least the intellectual aptitude for analysis and articulation, and this requirement was also met by virtue of the IoE's entry requirements. Articulation is a problematic requirement, however, since academic language and discussion is quite particular and may in fact bias the kind of discussion that takes place online.

Lastly, the research required that the participants remained in this country for the duration of the empirical element of the study and that they have enough time to spend taking part.

Given the theoretical requirements, the following dyads were formed:

Name	Dyad	Gender	Age	Course
Denilson Gomes	1	Male	26	MA Social Justice Education
Christa Popadou	1	Female	33	MA ICT in Education
Farah Parvez	2	Female	35	MPhil Philosophy of education
Richard Taggart	2	Male	30	MA ICT in Education
Jenny Loren	3	Female	26	MA Policy Studies
William Burgess	3	Male	27	MA ICT in Education
Isabell Sintra	4	Female	23	MA Media Studies
Jack Bergman	4	Male	39	MA ICT in Education

Table 1 Participants and their Dyadic Membership

The names have been changed to preserve anonymity, although they were chosen to reflect the ethnicity/nationality and gender of the participant.

3.2 Data Collection: Manipulation of the Context

While the empirical setting emphasised a quasi-experimental approach, it also made use of ethnographic methods in the research design. In its quasi-experimental form the design attempted to establish a relationship between the independent and dependent variables. The variables were generated from the existing literature and are given more fully in the research hypothesis. The research attempted to draw out a relationship between concept variables, in this case between cognitive models and ethical discourse types. This was achieved by varying the cognitive model (independent variable) and analysing the effects on ethical discourse (dependent variable) in an online setting which is theoretically more conducive to highlighting any such relationship. The cognitive models of concern are those relevant to Piagetian and Vygotskian pedagogic strategies, that is, cognitive constructivism and social constructivism respectively. The ethical discourse types of concern are Habermas' Ideal Speech and Rorty's Ironic Discourse.

Brown and Dowling (1998, p. 37) note that the concept variables used need to be "translated into an explicit procedure which can be repeated with a high degree of consistency". In order to render the concept variables visible, a

number of indicator variables were generated, again from the literature. These indicators allow us to recognise the concepts when analysing the data, and are given as follows.

Habermas' Ideal Speech is one that encourages free and equal participation and the use of reason to generate debatable statements. It is a formal process in which each agent has the right to disagree and is coerced by the force of the better argument only. Ethical principles generated within this process will be valid, but the consent of each effected party must be given.

Ironic Discourse avoids the metaphysical search of essences, instead promoting unending redescription and the move toward greater freedom, rather than 'Truth'. Instead of arguing well, Ironic Discourse encourages the use of the imagination and of speaking differently. What is of ethical concern is simply what is possible and important and is more likely to be better served by literature and media than systematic philosophy or other rational discourses.

A Piagetian setting is one characterised by equality of interaction. In it, peers are encouraged to employ scientific thinking and to internalise feedback in a self-organised attempt to develop one's own understanding.

A Vygotskian setting is one in which a hierarchy of expertise is established. The expert is expected to scaffold interaction with the student who employs situated thinking. The expert provides contingent feedback to the student in order to develop their understanding.

Given the requirements for consistency outlined above and the rather high-level nature of the indicators however, it is questionable to what extent the concept variables would be repeatedly recognised using the indicators provided. This is a recognised weakness in the research design.

One of the problems with such pre-test-post-test approaches is the difficulty in isolating the causal factors of change. To overcome this, one could recruit a

control group, which would be as similar as possible to the experimental subjects, but which would be placed in a setting that the experimental group would have otherwise been in (Brown and Dowling, 1998, p. 38). I have attempted to control for the order of the experience by starting half the experimental group (two dyads) in a Piagetian setting and the other half in a Vygotskian setting, and then alternating the pedagogic setting half way through the study.

3.3 Data Collection: Structure

In order to gather data during the empirical intervention, I employed an observation schedule. This schedule used event sampling, rather than interval sampling, because to a large extent, the interaction between the participants is pre-structured, in terms of reviews, messages and replies (which constitute the events). The events that I looked for were pre-coded analytical categories, drawn previously from the literature and were made up of the indicator variables, outlined above. I was also open to other categories that may have arisen purely from analysis of the empirical data. In this latter sense, therefore, the setting and the data generated took on a more ethnographic colour.

In terms of the pre and post-tests, these were conducted as semi-structured clinical interviews. An attempt was made to conduct the pre-test interviews that maintained the dyadic form of the interaction. Due to logistical problems however, this was possible only for the second dyad. In the post-test interviews I could not interview one participant from the fourth dyad, again due to logistical reasons. The interview was semi-structured because I did not expect that the concepts and language I was using to be immediately understood, or that initial responses would be fully coherent. Thus, I employed prompts and redefinitions to try and make the language as intelligible as possible.

Before the pre-task interviews, the participant's were given training in the use of the web site (viewreviews.com), which I had constructed with the specific aims of the research in mind. Approximately one hour was spent training the participants individually, and answering their technical queries. This experience was then used in a number of iterative redesigns in order to enhance the usability of the site. In hindsight, I should have conducted this in pairs, but this was not logistically possible.

The participants were also given detailed descriptions of the task requirements, the background to the research and the pedagogic settings beforehand, in order to apprise them of the empirical environment (Appendix A).

In the pre-task interview (Appendix E), I sought to try and uncover the participant's previous experience with ethical and media analysis, technology and their expectations regarding what they thought they might learn from this exercise. I also sought to start them thinking about the media text to be used for analysis and to check their understanding of the task requirements and the settings.

In the post-task interview (Appendix F), the aim was to elicit what the participants felt they had learnt from the experience and if any changes in their understanding had taken place. I also wanted to know their thoughts regarding their dyadic partners, the usability of the online environment and how it compared to other mediums of communication.

3.4 The Online Environment

The web site (Appendix G) was structured in such a way as to privilege individual participants, rather than individual messages, that is, it was user-centric. Users were required to register and enter their personal details such as a general description, age, gender and email. I took a digital photograph of each participant and displayed it one their 'Profile Page' (not shown in the appendices to preserve anonymity).

Once they registered their details, users then went on to write individual reviews of any media text of their choice, as long as they are within the categories provided. The categories encompass books, film, music, software, computer games and electronics, each with further subcategories. The reviews were pre-structured to avoid a steep learning curve. The review details included product name, producer, rating, a general description, a positive description and a negative description. It also included the ability to link to other sites (like online book retailer Amazon.com, for example) and to include images of the media product.

Each review had a built-in message board attached, which required only the user's email address, subject header and message body. This message-board was threaded allowing users to post replies to particular messages and to view original messages and message replies. The registration, review and message dates were all recorded and displayed. An email to the message board owner would be triggered once a message or reply had been posted, thus keeping them informed of any new messages.

A powerful search facility was also provided as well as links directly from the home page to user's personal 'Profile Pages', to facilitate easy navigation.

3.5 The Tasks and Pedagogic Settings

The interaction was divided into two tasks and two settings (Appendix A). Setting A was the Piagetian approach and it consisted generally in trying to construct the dyadic members as equals to the discussion. This was achieved by requiring that the dyad discuss a single media text familiar to both members. Setting B was the Vygotskian approach and broadly consisted in constructing one dyad member as the expert and the other as the apprentice/student, for half a task. This was achieved by ensuring the 'expert' reviewed a media text that the 'apprentice' was not familiar with. The relationship was then inverted with another media text becoming the focus for analysis and discussion. Expertise was located in the difference in familiarity with the media text and was thus a relative, not absolute construct.

Task 1 saw the first two dyads in Setting A and the last two in Setting B and Task 2 saw the reverse situation. This was required so as not to bias the order of the pedagogic settings. Each task was intended to last for ten days each, but in fact, due to lack of time, lasted for no more than one week each.

The aim of the Piagetian Setting is not necessarily to reach consensus by resolving contradictions and conflicts. Diverging positions are fine as long as the partners can understand each other's positions from a more inclusive, higher level of abstraction. Participants will need to demonstrate a clear, coherent understanding of the other's position. The end point will be of 'equilibrated' (adjusted) cognitive models of ethical issues – they may still have the same (diverging) positions, but they will also have acquired a more abstract position with which to describe each other's positions.

The aim of the Vygotskian Setting is to bring the student to a 'higher' stage of development, ultimately a stage of independence from the instructor. The end result should produce a student capable of an independent demonstration of the ethical position (either abstract/rational or contextual/situated) developed by the instructor.

4 Analysis and Discussion 1: Pre-task Interviews

4.1 The Dyads

Name	Dyad	Gender	Age	Course	Order	Read Instructions Beforehand?	PT/ FT	Location	Home Internet
Denilson	1	Male	26	MA Social Justice Education	6	No	PT	Off Campus	56K Unlimited
Christa	1	Female	33	MA ICT in Education	8	No	FT	Off Campus	Broadband
Farah	2	Female	35	MPhil Philosophy of education	3	No	FT	Off Campus	56K
Richard	2	Male	30	MA ICT in Education	2	Yes	FT	Off Campus	56K Unlimited
Jenny	3	Female	26	MA Policy Studies	1	A little	FT	Off Campus	56K Unlimited
William	3	Male	27	MA ICT in Education	4	Yes	FT	Off Campus	56K Unlimited
Isabell	4	Female	23	MA Media Studies	5	Yes	FT	On Campus	Library broadband
Jack	4	Male	39	MA ICT in Education	7	Yes	PT	Off Campus	Broadband

Table 1 Outline of Participant's Backgrounds and Personal Details

Dyad	Task 1	Task 2
1	Piagetian	Vygotskian
2	Piagetian	Vygotskian
3	Vygotskian	Piagetian
4	Vygotskian	Piagetian

Table 2 Task Order and Associated Pedagogic Setting

4.2 Principles of Recognition

Habermas' Practial Discourse is one which encourages free and equal participation and the use of reason to generate debatable statements. It is a formal process in which each agent has the right to disagree and is coerced by the force of the better argument only. Ethical principles generated within this process will be valid, but the consent of each effected party must be given.

The Ironic Discourse avoids the metaphysical search of essences, instead promoting unending redescription and the move toward greater freedom, rather than 'Truth'. Instead of arguing well, Ironic Discourse encourages the use of the imagination and of speaking differently. What is of ethical concern is simply what is possible and important and is more likely to be better served by literature and media than systematic philosophy or other rational discourses.

A Piagetian setting is one characterised by equality of interaction. In it, peers are encouraged to employ scientific thinking and to internalise feedback in a self-organised attempt to develop one's own understanding.

A Vygostkian setting is one in which a hierarchy of expertise is established. The expert is expected to scaffold interaction with the student who employs a more practice-oriented, situated thinking. The expert provides contingent feedback to the student in order to develop their understanding.

4.3 Experiences with Technology

Most participants claimed to have an intermediate level of experience with technology (see Table 1, Appendix A for a summary). This kind of experience includes for example, use of the computer everyday and an understanding that goes beyond word processing and emailing. The experience was situated, as opposed to being formal and academic. That is, experience was

acquired while making use of computers for work or educational purposes, rather than as a result of study for its own sake. Most usage was indirect – using technology to achieve another, non-technological end.

> Denilson: "I would describe me as an intermediate because I worked in internet provider and I've been having contact with technology for so many years. But my contact has not been professional contact."

There was a general reluctance on the part of the participants to convey themselves as more expert than either their partners or the interviewer in terms of technology. Rather, they sought to establish themselves as equals. This may be interpreted through a Piagetian lens as an effort to form a learning environment emphasising a lack of social dominance. Even when one participant (Christa) claimed a level of technical expertise, she quickly countered that in fact expertise was relative and that in the USA, she would perhaps be seen as a beginner. It seems the label 'intermediate' (after prompting from the interviewer) was sufficiently unthreatening for all for the purpose of establishing equality. It would seem that the participants were positioning themselves as what Wegerif calls 'newcomers' (1998, p. 14) or 'outsiders' in an effort not to privilege themselves. As such, success in the online environment would require that they move into becoming 'old-timers' or 'insiders', which would mean adopting good online 'style' and a form of Habermasian communicative rationality (ibid).

4.4 Experiences with Ethical Analysis and Discussion

Most participants constituted ethics as a formal field of enquiry, referring to a particular body of literature, codes of conduct, specific virtues, levels of expertise and academic practices (see Table 2, Appendix B for a summary).

> Jenny: "…it was certainly all about what values does a social worker hold dear - what are the ethics of taking children away from their parents, or sectioning mentally ill people, because a lot of that is a question of value judgement."

A few saw ethics as less formal but somewhat irrelevant, confining it to either relaxed discussion or contrived settings. Only one saw it as relevant and this was ethics as an active resistance to manipulation by others. Interestingly, all those who saw ethics as essentially formal and confined also viewed ethical discussion as being of a particular kind, involving the use of reason, equality, grounding and justification.

> Interviewer: "it's important to argue a case, to have a rational debate? Is that what's important?"
> Jack: "it's important to me. What I listen for in terms of making a judgement as to whether I feel a reasoned case has been made, if I can see where the position is coming from, and they have reasoned it out and they are backing it up…"

All participants said their ethical considerations were driven by science, with some also mentioning spirituality, art and philosophy.

Ethical analysis is seen as formal and theoretical, something approached via a body of literature or academic study, or by being apprenticed into via a particular community of practice. It was not seen as something particularly relevant to the participants everyday personal lives and there was no evidence that the participants ever used philosophical ethics – to whatever degree – in the formation of their own ethical principles. Yet a great deal of

emphasis was placed on, what can be seen in its prototypical form, as Habermas' Ideal Speech Situation. The participants took pains to highlight the value they held in debate that foregrounded reason, free and equal participation, the force of the better argument and the right to disagree, and which backgrounded emotion and egocentricity. This is the stereotypical modernist vision of the open-minded search for truth among rational humans. Indeed, much of what motivated and drove ethical discussion for the participants was science – the quintessential modern practice which is publicly 'seen' to rely on the force of reason alone in a pure and meritocratic search for objective truth.

The interaction between participants in an ethical discussion would need to be one of equality, driven by science and scientific thinking. These are all-important requirements for Piagetian social learning, which views learners as scientists, alternately hypothesising and testing ideas in an iterative process of greater abstraction and adaptation. Indeed, discussion for the participants was usually motivated to a large degree by science. As Jenny said "it determines what's possible and hence the debate", and this reflects Rorty's definition of the moral domain as that which is possible and important. The participants often referred to genetics or environmentalism as examples of ethically interesting scientific issues. It is not a coincidence that these are the kinds of issues most in the public eye, and as Rorty would say, are far more relevant to the makeup of our ethical perspectives than rarefied philosophical debate.

Yet, not only was ethical analysis seen as requiring formal thinking, it was positioned as an expert domain, one in which the participants had not been and did not seek to be apprenticed, in the Vygotskian sense. Thus a contradiction emerged between the participants seeing ethical analysis as something to be apprenticed into and ethical discussion as requiring the absence of hierarchy.

4.5 Experiences with Media Texts and Analysis

Most participants claimed an intermediate level of understanding of media analysis, with a number of them taking pains to highlight their lack of expertise (see Table 3, Appendix B for a summary).

> Isabell: "…never an expert…expertise is an illusion…a teenager may be able to do it better".

Also:

> Interviewer: "so you would say that you know basically how to analyse a text?"
>
> Richard: "no!"
>
> Interviewer: "you don't?"
>
> Richard: "no!"
>
> Interviewer: "why not, I mean you gave a pretty good analysis of the Fisher King?"
>
> Richard: "but it was sort of from an ignorant standpoint. I mean I didn't have a specific umm…what's the right word - epistemological maybe?…viewpoint that I was analysing it from."

The subjects did not see media analysis as something that could be debated by anyone on an equal footing and thus was not open to Habermas' Ideal Speech. Like ethical analysis, it was seen as a particular practice, but unlike ethical analysis, the participants felt it was interesting, useful and relevant, an activity which many had engaged in previously and which many would have liked to progress further in.

For Rorty, literature and the media, is far more important to ethical issues than systematic philosophy. This was reflected in the relevance of media analysis compared to ethical analysis.

Similarly to their experience with technology, the participants made great efforts not to establish themselves as experts. Again, this could be seen as an

attempt to remove the hindrances of social dominance, required of a Piagetian setting. Alternatively, it could be seen as a willingness to be apprenticed and scaffolded by someone more expert.

4.6 Expectations of Change of Ethical Position

Almost all participants claimed their ethical positions were largely set and didn't expect any changes to it. Interestingly many thought that the positions of others would be less secure, that other's minds would be less made-up (see Table 4, Appendix B for a summary).

Even though nearly all positions were decided before hand and were not expected to change, most participants considered themselves to have open-minds, that is, they claimed that their positions could be changed given an appropriate argument.

> Christa: "I think that we are old enough not to change it [her ethical perspective] (laughs). Know what I mean? I think that we are too old to change our opinion. If someone tried to change my opinion would take a long time. He has to prove it. He has to have some really good points in order to convince me.
> Interviewer: "so you don't think that you would be able to change somebody else's ethical perspective even?"
> Christa: "I don't think that somebody might change mine, but I'm not sure that I wont change someone else. It's different. I might can.

For almost all, discussion in the form of debate, dialogue and argument was important. The challenge of the debate was expected to be the engaging factor in the interaction, especially when the quality of such debate threatened to actually change the participant's ethical position.

> Jack: "…if it happens then great - that would be really interesting and that would really engage me. I think it's important to say if I felt my ethical position was likely to be changed, I would become very engaged in it. It's at these times that I would want to become involved in the debate. That's quite an important point actually."

In terms of ethical positions, the participants felt that not only were their minds already made up, but that it would be very unlikely that their position would be changed by their partners in any discussion. Yet, as before they greatly emphasised just how open-minded they were generally. Again, this seems to be a reference to modernist rationalism, and to a form of discussion modelled by Habermas' Ideal Speech. This is consonant with Buckingham Shum and Sumner (1998), who consider openness to multiple perspectives to be crucial political participation online, as it encourages good online debate. The participants would therefore seem to possess a necessary ingredient for successful critical engagement with each other's ideas online.

Claiming to be open to change by rational means, whilst not actually expecting to change, would indicate that either the participants positions were already the (only possible) result of rational deliberation, or that the participants did not have confidence in the ability of others to reason effectively. Both options are unlikely, the former because the participants had earlier dismissed ethical analysis as something abstract, formal and somewhat irrelevant. Of course, it could also mean that what the participants claim regarding openness to change, and what they actually practice, are two very different things. Such discussion may be important only as a means of defending one's position, rather than a means of actually changing it, which is consistent with the admission by participants that their ethical position was quite secure. Open-mindedness may then be seen as 'teachability' on the part of others an in a CMC setting and would correspond to Bonk and King's higher Facilitative and Management online interaction types. These seek to provide direct assistance to students in an explicitly hierarchical CMC environment and to respond to student missteps with counterexamples and counter-arguments (1998, p. 195).

While the participants knew how to cast themselves in a rational, modernist light, they actually had very little apparent intention of ever changing, or even engaging at all critically with, their ethical positions, few of which, incidentally, could be explicitly articulated. This fits well with Rorty's model of an Edifying Discourse – one in which the interlocutors engage in a fruitful and interesting, though ultimately incommensurable discussion. The security of the ethical positions admitted by the participants might be seen as incongruent to Rorty's Ironic Discourse. However, the participant's positions were neither the result of rational enquiry, nor were they susceptible to interrogation by rational means, and as such could be seen as open to the unending contingency required by Rorty's Ironic Discourse.

The participants represented themselves as quite secure in their ethical position. This implies an unwillingness to accept feedback from others regarding those same positions, especially from those who the participants saw as less secure, which was everyone else. Such feedback would be essential in any Piagetian setting. Yet the participants claimed to accept the conditions of equal and open debate, including having an open mind. Again, another contradiction emerged, between being unwilling to accept feedback on one's position, yet requiring an equal and open-minded debate.

Indeed, each participant positioned themselves as experts, in a hierarchical ordering, if only with respect to their own ethical position. This would imply a willingness to apprentice others into their position, but an unwillingness to be apprenticed into the positions of others. Thus, open-mindedness and challenging discussion can be seen in a Vygotskian sense as pedagogic tools for scaffolding each partner's knowledge and development.

4.7 Expectations of Learning

Participants were evenly split in terms of what they expected to learn from the ethical views of others (see Table 5, Appendix B for a summary). Some expected to learn only to assimilate a new set of ethical opinions from a distance, rather like studying a new and interesting culture, whilst others expected to engage more critically with others, in the form of argument. Most participants expressed pessimism about online (asynchronous) discussion, comparing it unfavourably to online synchronous chat or face-to-face discussion, expecting to learn little from the experience. This would reflect McConnell's concerns with the lack of non-verbal cues in text based CMC environments compared to the greater expressive power of face-to-face or audio-visual communication (1994, p. 81). No-one shared McConnell's concern of information overload however (ibid), expecting perhaps information *underload*, which is not something that McConnell seems to have factored into his model of online learning.

A number of participants expected to learn little about media analysis. A few expected to learn from others, rather than by themselves.

> Richard: "actually it would be interesting to see…I would think that a more direct debate…without the mediation of the computer would bring up more issues or allow for clearer arguments and a better chance of stances to change than with a computer between them"
>
> Interviewer: "okay. Why's that?"
>
> Richard: "just because of distance and time. Because this is gonna be drawn out…it's gonna be posting and responding, posting and responding…"

The participants' expectations were either to learn only about their partner's views or to critically engage with them. As we saw above, the participants had little intention or expectation of changing their ethical views, so this indicates that the subjects did not expect to learn anything from their partners that might challenge their own ethical positions, although there was a willingness to

challenge the positions of others. Indeed, the participants claimed they were interested in the views of others for their own sake, rather than to attempt a rationally motivated consensus and would thus be engaging in a postmodern, edifying discourse. This indicates interaction for the purposes of assimilation, in the Piagetian sense, or of re-educating them, but not of accommodating new ideas. A number of participants expressed a preference for either face-to-face discussion, or synchronous chat, indicating they expected a more direct environment would produce better results.

Since the participants positioned themselves at a technically intermediate level, yet expected to learn very little about the technology of online discussion, it would seem that the participants actually saw themselves as experts, without wanting to publicly constitute themselves as such. Perhaps this was a strategy to limit any risk to social standing that may arise from having to publicly demonstrate such expertise. This was not the case with media analysis, however, as many participants expected not only to learn more about this practice, but also to be apprenticed into it by others, who may well be more expert than themselves.

Further, the combination of the participants viewing themselves as technically expert and their preference for direct (face-to-face or otherwise synchronous) communication indicated that they had, even at this point, expected the task of discussing ethics in an online, asynchronous environment to fail.

5 Analysis and Discussion 2: Online Interaction

5.1 Analysis of the Participant's Profiles

The fourth dyad displayed the most about itself and had the highest word-count in total (see Table 1, Appendix C for a summary). Both members used all display options (Email, Age, Gender and Description) and in fact were the only participants to do so, apart from Jenny in the third dyad. The second dyad's members displayed the least about themselves, but they met face-to-face for the pre-task interview and had the highest average word-count per message and the most Engaging and Educational messages (for a definition of Engaging and Educational messages, see below). For example:

Dyad Two:

Farah's Profile (my addition in brackets):	**Richard's Profile** (my addition in brackets):
"Name: Farah Parvez Email: farah@abc123.com Age: Private Gender: Female Homepage: [blank] Description: Student and teacher of english"	"Name: Richard Taggart Email: Private Age: Private Gender: Male Homepage: [blank] Description: Student"

Compared to…

Dyad Four:

Isabell's Profile (my addition in brackets):	**Jack's Profile** (my addition in brackets):
"Name: Isabell Sintra Email: isabell@abc123.com Age: 23 Gender: Female Homepage: [blank]	"Name: Jack Bergman Email: jack@abc123.com Age: 40 Gender: Male Homepage: [blank]

| Description: Portuguese nationality. Currently doing an MA in Media Studies at the Institute of Education, London." | Description: Studying at IOE to do an MA in ICT in Education part time, work as a new media manager in Paddington for Health Promotion England,and living in Euston." |

The third dyad also had face-to-face meetings and had one of the highest word-counts especially for their reviews. The first dyad stands out for writing very little about themselves, never meeting face-to-face and for writing the least in their messages and in total. Thus, there would seem to be a correlation between the extent to which the dyad's members got to know each other and the amount they wrote.

This is described by the Open University (1998) as 'bonding' and is part of Salmons' (2000) five-stage model of online interaction. Wegerif (1998) might see this as part of moving from being an 'outsider' to an 'insider', generally feeling comfortable enough to begin writing reviews and messages. Those that did not meet each other face-to-face and who didn't make up for this by providing a description of themselves online, did not perhaps become comfortable enough to move on to the next stage of information exchange or knowledge construction (Salmon, 2000). It is not likely however, that each participant saw the other's efforts as an investment in the process which they were supposed to 'match'. The third dyad, for example, saw a sharp asymmetry between member's contributions to their profiles and reviews.

5.2 Analysis of the Participant's Reviews

The second dyad stands out in for being the only one in which both its members wrote about the same media text (see Table 2, Appendix C for a summary). The members also rated this media text differently and wrote approximately the same amount each about it. For example:

Dyad Two:

Farah's Review:	**Richard's Review:**
Product: Forest Gump	Product: Forrest Gump
Producer Type:	Producer Type:
Producer: Robert Zemeckis/Director	Producer: Robert Zemeckis
Product's Rating: Excellent	Product's Rating: Average
Price: 12.99 GBP	Price: 11.99 GBP
Reviewer: Farah Parvez	Reviewer: Richard Taggart
Date Reviewed: 19/06/2001	Date Reviewed: 20/06/2001

General Description: Classic film depicting the story of overcoming the obstacles of disability and stigma. […] The innocence and purity of the hero is his strength. […] Forest Gump is an inspirational tale of a real hero.

General Description: An incredibly preachy movie about an ordinary mans interaction with important events in history. […] The result is a sentimental look at american history, warts and all. […]

Positive Features: The story of Forest Gump is simple and direct. […] Its appeal is in its simple honesty. [...]

Positive Features: Has some mildy amusing moments. […] Well shot, and well put together, to bad about the script.

Negative Features: […] there can be no negative features to this film.

Negative Features: Gump is potrayed as a figure of amusement because of his disabilities, […]

The second dyad was also the only one not to include a mix of media types. The fourth dyad discussed different texts and was the only one to rate all of its media texts as Excellent – the rest of the dyads included a mixture of ratings.

It would seem that if the media text under discussion is the same, then the discussion would benefit from a difference of opinion, perhaps as to the quality of the text. If the text were different, then perhaps the best way to engage one's partner to a discourse would be if the text were rated very highly. The former case may be explained by the fact that divergent opinions of the same text would create a conflict between the interlocutors. This would

engage them in an attempt to understand the other's position and perhaps to change it, since the other party to the discussion can be expected to have an opinion as well. In the latter case, the person writing the review would need to 'attract' the other's attention in order to begin a discussion, and this is less likely to happen if the text being reviewed is rated lowly.

The first and third dyads were the only ones to employ different pedagogic strategies than what they had agreed to do. The first dyad reviewed different texts in a Piagetian setting and the third dyad tried to review the same texts in a Vygotskian setting. This may have created confusion, explaining why their discussions never really got off the ground. The second dyad met beforehand and was able to decide early on what their media text would be. The fourth dyad, following a Vygotskian approach was able to discuss different texts, removing the need for early co-ordination, which was much more important in the Piagetian setting. But the first dyad was unable to co-ordinate a common media text in time and so one member – Denilson – 'resorted' to what can be seen as a Vygotskian approach. The third dyad did not seem to know which setting they were in, trying to find a media text they both knew, to discuss. The first and third dyad may have suffered from what McConnell (1994) refers to as a 'weak' sense of time, with their being no sense of 'lateness' or 'earliness', and this could help to explain their inability to co-ordinate their activity early on.

There was a positive correlation between sub-section (General Description, Positive and Negative Descriptions) word-count and the existence of messages. Messages were only posted to reviews that were among those that had the highest Positive and Negative word-count. Very few reviews did not make any use of the sub-sections. By making use of the Positive and Negative sub-sections, the reviewer may have expressed a sharper opinion than might have been the case if restricted to just a summarisation of the text. This sharper opinion, in turn would be more likely to elicit a response from the dyadic partner, thereby generating a discussion. Usage of the sub-sections also show that the participants were willing to adopt the scaffolding of review writing, put in place by the author when designing the site. The participants

clearly valued a well-rounded review, which was to some extent facilitated by the sub-sectioning.

The three sub-sections and indeed the entire structuring of the review can be seen as Entry Level events in online interaction (Bonk and King, 1998, p. 195), which consist of initial and repeated presentation of information. The Positive and Negative Description sub-sections to some extent reflected (in greater detail) the General Description, which in turn reflected (again, in greater detail) the Product Rating ('Excellent', 'Good', 'Average' etc) given by the review's author. Structuring such events would be more difficult in a non-asynchronous environment and as such the sub-sections allowed for greater focus and elaboration as well as other electronic resources. These resources were in the form of links to reviews on Amazon.com, other related web sites and images of the text, and together with the focus and elaboration were all important advantages of asynchronous CMC environments (McConnell, 1994, p. 73).

Every participant wrote at least one review. Film was the most frequent category, with nine out of fifteen messages. The next frequent was books, with four messages. Most products were rated excellent and messages were only posted to reviews that rated the products excellent. All messages were posted to reviews of films, except one, which was a PC Game. Most reviews displayed a product price, but very few displayed either an image or a link outside the site.

The over-representation of Film may attest to the cultural currency of this medium. As a text, it has certain advantages over books, music and computer games. There is more likely to be a common set of films that the participants could discuss and the participants may have felt it was easier to refer to and describe a text that made use of more modes of expression (sound, visuals, movement). Film consumers are also more likely to have a similar enough experience of the text than for example with an interactive computer game. Also, films would seem to have more expressive power than other mediums

like books and computer games perhaps reflecting the importance McConnell places on non-verbal cues in audio-visual communication (1994).

5.3 Analysis of the Participant's Messages

We can see a strong correlation between the average words per message and the types of messages exchanged (see Tables 3 and 4, Appendix C). The second dyad's average words per message were the highest by far, and the messages were fully Educational (as opposed to Administrative), and mostly Engaging (as opposed to Distancing).

Engaging messages are those that attempt to address points directly, ask questions, offer solutions, establish positions and make requests of the partner to the exchange. Distancing messages would seek to draw the discussion to a close, or to avoid even starting it in the first place. Educational messages seek to address the topic of discussion expressing ideas and opinions. Administrative messages are somewhat off-topic, being more about what and when to write messages. The Educational-Administrative is one dimension and the Engaging-Distancing is another, so clearly, messages need not be Administrative just because they are Distancing, or Educational just because they are Engaging.

As an example of fully Educational and mostly Engaging Messages, Dyad Two (with repeated messages removed):

> **Farah's 'Forrest Gump' Message Board:**
>
> **Zaeem Maqsood**
>
> Subject: Forest Gump review   Date: 20/06/2001 12:30:26
> Farah, Your review is interesting and very apposite since we (incl. Richard)
> attended a seminar on the very topic! Do you really think there is nothing negative
> about the film? […] Why is moral purity equated with lesser mental development […]
> View original message | View replies to this message   Reply to this message
>
> **Richard Taggart**

Subject: Still Heroes   Date: 20/06/2001 12:47:17

I disagree with you zaeem. while the movie is preaching that the 'every man' is the real hero, it is still venerating the usual american heroes, like kennedy and elvis. the difference between gump and elvis is that elvis was aware of his success, this is his sin. gump remains angelic through his ignorance.

View original message | View replies to this message   Reply to this message

Richard Taggart

Subject: virtue   Date: 26/06/2001 12:50:08

Farah, I would argue that Gump is not more or less virtuos then the 'normal people' in the movie. In fact he may not be virtuous at all. his gift is his ignorance, which allows him to be unaware, not virtuous.

[…]

'just be nice to one another and everthing will be fine'. sorry my argument is a bit confused. but the movie seems to be a bit preachy and utopian in outlook. zaeem you really need a spell check on this thing.

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Farah Parvez

Subject: Re: Forest Gump review   Date: 29/06/2001 23:39:18

Perhaps it sounds too altruistic that one should see virtue and moral purity in the character of Forest with his lesser mental development as you put it.

[…]

My view of Forest is that it is precisely his position which enables him to be unaffected by the moral dilemmas and faults of a society ruled by rational thinking and intelligence!

[…]

So perhaps it's reassuring that Forest may teach us that simple acts of heroism are possible which may not need too much intellectualising. Conversely, it could be said that a negative aspect of the film is that it shows how lost the more intelligent in the community have become […]. However, the argument for the film I don't believe is any weaker than before. Of course it is open to interpretation.

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Farah Parvez

Subject: Re: virtue   Date: 29/06/2001 23:47:01

Maybe 'ignorance is bliss'!! However, more serously Forest is uncomplicated and this enables him to express real moral values simply without any intellectual clutter.

[…]

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As an example of mostly Administrative messages, Dyad Three (with repeated messages removed):

Williams's 'Mississippi Burning' Message Board:

Jenny Loren

Subject: mississipi burning   Date: 15/06/2001 11:55:32

I haven't seen this so not quite sure what I can say about it -

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William Burgess

Subject: Re: mississipi burning   Date: 15/06/2001 11:57:18

How about: Schindler's List Traffic Wilde Gatacca(?) American History X

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Jenny Loren

Subject: Re: Re: mississipi burning   Date: 20/06/2001 00:12:34

Hi William I went to see Brother by Takeishi tonight so I'll start on that. I'll write a review to start with, I

guess, and then you can get back to me about it.

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William Burgess

Subject: Re: Re: Re: mississipi burning   Date: 20/06/2001 10:11:48

Couldn't find you in the library yesterday....are you in today?

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Jenny Loren

Subject: Re: Re: Re: Re: mississipi burning   Date: 22/06/2001 10:31:47

I'm in today (Friday) so maybe see you later.

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The fourth dyad had the second highest average word-count. Its messages were mostly Educational and mostly Engaging. The first and third dyads had similar average-message-word-counts and message exchanges. Their average word length was the lowest and their messages were mostly Administrative and almost equally Engaging and Distancing.

The second and fourth dyads would thus seem to be engaging in what Buckingham Shum and Sumner (1998) call 'good' online debate (p. 139), that is, debate that is open to multiple perspectives and informed by relevant evidence and resources. Such online interaction can also be seen as what Crook calls online social conflict, characterised by disagreement between peers that would "prompt discursive moves of justification and negotiation" (1994, p. 136). This stands in relation the first and third dyad, which would be in Crook's earlier stage of 'mere' online articulation, itself a valuable form of interaction as it helps make ideas public and explicit.

One might have expected the Educational and Engaging messages to be more succinct rather than verbose, as addressing single points may make them more focussed and explicit. Instead, it would seem that, perhaps due to the highly asynchronous nature of the exchanges, the participants wanted to 'pack-in' as much as they could. It could also mean that there was simply more to discuss in Educational terms than about Administration, which is borne out by the fact that the Engaging dimension did not have as much impact on word-count than the Educational dimension.

We can see a correlation between the Educational nature of the messages and how quickly they become Distancing (see Table 3, Appendix C for a summary). For instance, in the second dyad, the messages were mostly Educational, and only the final message was Distancing, whereas in the third and fourth dyads, the messages are more Administrative and become Distancing much earlier on. It would seem that the Educational dimension of the message also has an impact on the Engaging dimension, as well as the word-count. Educational messages are more effective at engaging, even though one might easily consider Administrative messages to appeal more directly to the partner for contributions and responses. This seems to indicate that interlocutors respond more to direct engagements with either the topic in hand or their previous contributions than to appeals for greater activity.

5.4 Testing the Research Hypotheses

The research hypothesis was set out as follow:

A Piagetian approach to pedagogy will encourage a more modernist form of ethical discussion, as characterised by Habermas' Practical Discourse and a Vygotskian approach will encourage a more postmodern form of discussion, as characterised by Rorty's Ironic Discourse.

5.4.1 First Dyad

This dyad was supposed to start in a Piagetian setting but failed to find a common media text to discuss. So Denilson began to interact with Christa about her review on 'Requiem for a Dream', which he had never seen. Thus, it turned out to be a Vygotskian environment, which they stayed in, as they eventually failed to make the transition to Task 2. The only non-Administrative message was Distancing. Denilson did not seek to be apprenticed into Christa's ethical position. Rather he sought to challenge it, and did so by directly focusing on one of the issues raised in her review - that of the power of the media in limiting our freedom. In this sense, Denilson took a Piagetian approach to the discussion, seeking to create conflict with his interlocutor. There was a failure on the part of the expert – Christa – to contribute (guide or scaffold) to the discussion, and Denilson obliged not by filling the expert's role, but simply by dominating the discussion and challenging Christa's perspective.

Christa can be seen as achieving only Entry (first) level events of presenting initial information, but Denilson has achieved at least the Transfer (second) level of providing 'higher', unfamiliar materials (Bonk and King, 1998, p. 195). Denilson's domination of the online exchange can be seen in McConnell's terms by steering the choice of conversation and by writing the lengthiest messages (1994, p. 28). There was no social conflict, only articulation (Crook, 1994, p. 135) and they reached Salmon's third stage of information exchange (but not knowledge construction) (Salmon, 2000).

An interesting case study is that of Denilson, who chose at one point to review a water filter, which because there was no corresponding category, he listed as a book:

> Interviewer: "you did a review of a water filter. Why did you do that?"
> Denilson: "you asked me to write a couple of reviews for the partner. I was thinking of books or movies. And all of a sudden it came into my mind 'it's a review thing, why do I have to be limitated?' ".

In terms of Salmon's (2000) model, since Denilson is challenging the givens in the system, he is at the highest (fifth) stage of interaction, a stage after knowledge construction (fourth stage). Yet it is not clear that Denilson, and the first dyad generally, progressed beyond the third stage of information exchange. Similarly, Wegerif (1998) would consider Denilson as having moved from being an 'outsider' to an 'insider', yet this is difficult to sustain. Thus, it would seem linear models of progression such as Salmon's and Wegerif's are perhaps too simplistic and may run into difficulties in 'real world' settings. Instead we see participants 'jumping' between different stages in different contexts.

Dyad One:
Christa's Message Board:

Denilson Gomes

Subject: reviews   Date: 21/06/2001 14:10:35

If you have not read any of the books that I've reviewed, let me know. So we can try to find a commom media to write. Thanks Denilson

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Christa Popadou

Subject: Re: reviews   Date: 23/06/2001 19:07:34

I am sorry Denilson, i am freaking out this time... I just managed to check my emails now after 3 or 4 days...I ll try to do it on Sun. many thanX and I am sorry about that :(all the best, Christa

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Denilson Gomes

Subject: Requiem   Date: 26/06/2001 21:14:55

While people generally criticise the power of the media - which, indeed, I agree - they say far less (or none at all) about the right that the media has to express her view. Further more, the public take for granted that this power is so much that they can't avoid it. Thus, disconsidering some other options that they have, such as not watching the product (if it's a movie) or not to read the product (if it's a book).

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Christa highlighted what she saw as an important theme in her media text - the idea that much of the media fulfils little more than a 'brainwashing' role. This was an appeal to an 'unbrainwashed' state, a prior, natural state, closer to the 'Truth' that the media is 'hiding' from us, and as such is clearly essentialist and metaphysical and would be more consonant with Habermas' Discourse Ethics.

Christa's 'Requiem for a Dream' Review:

"Positive Features: […] it hammers the brainwash that media are doing to most people around […]"

Denilson expressed similar views, even though he engaged critically with Christa's review. Denilson referred to the "right that the media has to express her view" and that the public could in fact avoid such brainwashing by avoiding the media itself, again appealing to a state of truthful awareness, characteristic of scientific modernism. This dyad was on the whole very modernist in the content of their discourse.

5.4.2 Second Dyad

Both members wrote about the same media text, and thus correctly followed the instructions for the construction of a Piagetian environment. Farah was the first to write a review about the text - 'Forest Gump' (*sic*). Farah chose to write about the film in a positive light, using words such as 'classic', 'heroism', 'virtues' and 'triumphs'. She even went as far as to say "there can be no

negative features to this film", which was the starting point for the ensuing discussion:

Farah's 'Forrest Gump' Review

"[…] Audiences have long been exposed to illusions of heroism and courage but Forest Gump challenges all of that. The innocence and purity of the hero is his strength. […] Its appeal is in its simple honesty. […] the storyline so beautifully written that there can be no negative features to this film."

Richard wrote his review the next day and was far more critical of the text, using words such as 'preachy', 'utopian' and 'sentimental'. Thus, definite and opposing positions were established, allowing for a lively and focussed discussion in which both Richard and Farah made direct reference to each other's reviews and messages. In Crook's terms, the dyad had moved beyond 'mere' articulation online to social conflict (1994, p. 135), disagreeing, justifying and negotiating. In Salmons' model (2000), the pair's interaction was at least at the third stage of information exchange, and possibly on the fourth, of actual knowledge construction. Richard even seemed to have reached the fifth level of challenging the givens of the system by saying "zaeem you really need a spell check on this thing." Since this dyad worked in a Piagetian setting, they achieved the Transfer (second) level of interaction of providing unfamiliar materials and concepts (Bonk and King, 1998, p. 195). There was little domination in McConnell's (1994) sense as each wrote approximately the same amount and they co-steered the online discussion.

Neither party tried to establish themselves as experts in this movie, although it is interesting to note that Richard attended a seminar on the very topic of 'Forest Gump' just a few days prior to the discussion. Neither party changed their position, and there was no consensus reached. This was clearly a Piagetian approach to the educational setting. Also, they never managed to make it to Task 2.

This dyad's discussion explored both Ironic and Essentialist themes. Richard sought to "argue" his case and directly disagreed with the author's point, providing evidence and counterexamples "the usual american heroes, like kennedy and elvis" in the process. Farah recommended a "back to basics approach of values in society". She referred to "true heroes" as well as "real moral values" and the utopian vision that Forrest Gump represents. Her messages included such emancipatory language as "challenging" social stigmas and perceptions. Forrest Gump could "help them see their own faults" and thus expose 'Truths'. She proposed an "argument for the film" but allowed that it was "open to interpretation", both hallmarks of rational, Habermasian perhaps, discourse.

Yet each point out various postmodern themes at work. Richard redescribed Forrest's ignorance as "unaware, not virtuous", pointing out the text's utopian bent. Farah explored how the film "challenges the stereotypical perceptions of intelligence and disability", that is, how it redescribed, and challenged the "rational thinking and intelligence" of society, declaring finally that "maybe 'ignorance is bliss'!!". On balance, this dyad's discourse would seem to be predominantly modernist.

5.4.3 Third Dyad

Although this dyad started in a Vygotskian environment, in which one member was supposed to establish their expertise by reviewing and discussing a media text that the other member had no experience with, the initial messages demonstrate little interest in one party apprenticing the other into an ethical position. Instead, Jenny and William made a number of attempts to find a media text in common. In response to William' review about 'Mississippi Burning', Jenny said, "I haven't seen this so not quite sure what I can say about it -". At this point, the pair was also engaging in face-to-face meetings which was three in total. They finally decided to discuss a film that Jenny was due to watch.

Jenny wrote a review about 'Brother' and the dyad then moved to Jenny's message board to continue their discussion. Jenny wrote a detailed review of

the text and William then showed some interest in being apprenticed into her ethical position. He asked, "What were the gangsters ethics and codes as you mentioned?"

Although, he focused on a comparison made by Jenny of the film 'Brother' to another director he was more familiar with, this can still be seen as an apprenticing approach by William. He did not criticise her review, but offered examples ('The Godfather', 'Carlito's Way') of what he saw as fitting into a framework of analysis (gangster's codes-of-conduct) being constructed by Jenny, and hence demonstrating his understanding of that framework. Although this demonstration was waiting to be assessed by Jenny, the discussion stopped there and the dyad did not make a successful transition to Task 2. Although this dyad was quite clear about it's pedagogic approach, there was a failure to respond on the part of the supposed expert.

While Jenny chose the topic, William clearly dominated the discussion (according to McConnell's model (1994)) in terms of length of exchanges. This dyad did not progress beyond Bonk and King's Entry level events of information presentation (1998, p. 195) and there was no social conflict at all, only online articulation (Crook, 1994, p. 135). They also reached Salmon's (2000) third level of information exchange (without knowledge construction).

Jenny engages in numerous poetic redescriptions in her review of 'Brother'. She refers to the bloodstains of shooting victims as "joyously explosive splashes of colour", with the "excitement of a Jackson Pollock". Again, the body decorations of the Japanese Mafia are described as "beautiful tatoos". William similarly employs a postmodern approach, seeking to list pragmatic exemplars (Tarantino, 'The Godfather' and 'Carlito's Way') of the genre under discussion, rather than define, or essentialise it. He also points to the occasional laughing or even sympathising of the audience with scenes of violence, a reference to the power of redescription and the contingency of meaning. However, in his review of 'Mississippi Burning' William refers to the "violent mistreatment of black people" and of how the "black population were victimised" and as such seems to subscribe to a 'common sense' ethical

position, failing to explore the contingent nature of common sense itself. The dyad's discussion however, is predominantly postmodern.

5.4.4 Fourth Dyad

Isabell wrote a fairly detailed review of 'Black & White', a PC-based "God simulation game", which evidently caught Jack's interest in what was intended to be a Vygotskian environment. However, after failing to elicit a response from Isabell, Jack established an uncritical position in relation to the game. Jack then wrote a similarly detailed review about '2001: A Space Odessey' (*sic*) and Isabell seemed to show some interest in being apprenticed into Jack's ethical position, to which Jack duly obliged:

Jack's '2001: A Space Odyssey' Message Board:

Isabell Sintra

Subject: ethical issues in 2001: Space Odyssey Date: 27/06/2001 10:10:49

Dear Jack Do you think there are ethical issues important to dicuss in this film? If so, which ones? Thank you Isabell

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Jack Bergman

Subject: Re: ethical issues in 2001: Space Odyssey Date: 27/06/2001 12:21:16

Well I think that this film is particularly interesting as unlike most of Kubrick's work the ethics are very hard to tease out. With characters sch as 'Alex' in a 'Clockwork Orange' or in the plot of 'Dr Strangelove' the moral issues and dilemmas the characters face are clearer and more obviously challenge our perceptions of 'normality' and our understanding of the need for an ethical society. However in '2001' we have a finer set of issues placed before us to ponder- and neither Clark, the author, or Kubrick give clear answers, which in my view is quite proper. […]

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At this point Isabell became more confrontational, questioning Jack's conclusions in order to challenge them, rather than to illuminate or model them. However, Jack maintained the position of expertise he had established, passing on his opinion without showing signs of interest in Isabell's. Isabell brought the discussion to a close by pointing out the difference of opinion and

the need for her to review the text. The discussion ended by moving from a broadly Vygotskian approach to one of greater equality between the interlocutors. This dyad also fails to move onto Tasks 2.

Although Jack's position of expertise was maintained, Isabell refused to take on the role of the submissive apprentice, challenging Jack's opinion, while ultimately supporting his pedagogic role. Thus, there was little dominance of the discussion by any one member of the dyad, according to McConnell's model (1994). The dyad had moved to at least stage three and possibly four of Salmon's (2000) model, that is they were exchanging information and constructing knowledge. Also, the dyad had moved beyond articulation to online social conflict (Crook, 1994, p. 135) and reached Bonk and King's (1998, p. 195) Transfer (second) level interaction.

In this dyads discussion about '2001: A Space Odessey' Jack refers to the ability of the text to "challenge our perceptions of 'normality'". Isabell explored the possibility that "we had been living in a game according to the rules of someone just like us", rather than living according to a higher, absolute authority. Also, in Isabell's review of the God-simulation 'Black & White', she celebrates the triumph of freedom over truth by declaring "we will never be judged because we are a god". She also identifies the game's essentialist downside "the game identifies certain behaviours as 'good'", but affirms that "all attitudes are valid possibilities". These are clearly ironic postmodern positions, compared to Jack's reference to the "collective moral and cultural wisdom" in '2001' and the need to "share…our ethical vision", which seem to have a lot in common with Habermas' Discourse Ethics. Isabell perhaps saw the discussion as an Edifying Discourse by saying that although the interlocutors saw things differently, it was interesting just to hear a different opinion. On the whole, this was a postmodern discussion.

Jack's '2001: A Space Odyssey' Message Board:

Isabell Sintra

Subject: film   Date: 04/07/2001 17:54:03

Hi Jack Thanks for your answer. I think we see things in a different way, but it's interesting to hear a

different opinion. I should watch the film really! Romeo and Juliet sounds great to me!

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5.5 Summary of Pedagogic and Ethical Positions of Dyads

In two of the dyads (dyad one and three), there was a failure on the part of the expert to fulfil their role, leading to the domination of the discussion by the 'apprentice'. These dyads produced low average word-counts per message and low Educational and Engaging message content. In the other two dyads, either there was no failure on the part of the expert (dyad four) or the peers established equal but opposite positions (dyad two). Neither of these dyads experienced domination by one partner, however. They had high average word-counts per message and high Educational and Engaging content.

Thus it would seem that the combination of *lack of domination and avoiding an 'expertise vacuum'* are important elements for maintaining the quality of the discussion. High-quality discussions were possible in both Piagetian and Vygotskian settings, given certain conditions, and the Vygotskian setting (dyad four) was still effective despite, or I would argue *because of*, the failure of the 'apprentice' to submit fully to the experts authority. Moving from one setting to the other proved extremely difficult for all dyads, if not impossible, however.

We can see below that the second and fourth dyad achieved the highest levels of interaction according to the models listed. This is despite the fact that Bonk & King's and Crook's models are aimed at Vygotskian and Piagetian

settings respectively, which would call into question the degree to which we can separate these two settings online, perhaps.

Dyad	Bonk & King	McConnell	Salmon	Crook
First	1st level	Dominance	3rd level (one reached 5th)	Articulation only
Second	2nd level	Little	3rd-4th level (one reached 5th)	Social conflict
Third	1st level	Dominance	3rd level	Articulation only
Fourth	2nd level	Little	3rd-4th level	Social conflict

Table 1 Matrix of Dyads and their Progression According to Models of Online Interaction

6 Analysis and Discussion 3: Post-Task Interviews

6.1 Expectations and Learning Achievements

On the whole no participant adopted their ethical perspective of their dyadic partner, but they did learn more about their partner's positions, both through the reviews written and the ensuing discussion (see Table 1, Appendix D for a summary). Often, they were engaged enough to want to experience the media text themselves, if they had not done so already.

> Interviewer: "did you learn more about the other person's ethical position?"
>
> Richard: "yes. That they were…quite different from mine, at least in dealing with the one movie that we reviewed. They were quite markedly different"

That the participants did not adopt the ethical positions of their partners does not of course entail that they were not successfully apprenticed into their partner's position. If one accepts that apprenticeship is an addition to subjectivity, rather than a (wholesale) modification of it (Dowling, 2001, personal communication, my addition in parenthesis) , then it is possible to argue that by experiencing and understanding their partner's position(s), the participants were acquiring additional subjectivity and hence were in fact being quite successfully apprenticed. That the participants claimed their apprenticeship to be a failure would indicate that they saw apprenticeship as requiring such a (wholesale) modification of their subjectivity.

Most participants made distinctions between ethical and textual analysis although textual analysis was seen as necessarily having ethical implications. They also made the distinction between using the text as a motivation and using it as an authority, or language for ethical discussion. Very often, this was seen as corresponding to a lowbrow and highbrow distinction,

respectively, with participants going to some lengths to avoid what they considered to be lowbrow texts.

> Interviewer: "did you make much distinction between ethical analysis and textual analysis?"
> Jenny: "well, ethical analysis doesn't have to be textual, but textual analysis is inherently ethical…you're picking out the values and you're taking a standpoint on those values…"

Here, the participant holds the act of "picking out values" (textual analysis) as being intrinsically value-laden (ethical analysis), but of course this need not be so. This entailment requires a necessary political/ethical dimension to textual analysis. It is not clear, however, that such a requirement need exist. When picking a shirt from a rack, for example, surely one choice is as ethically unimportant as another? This is not to dismiss the participant's comments, though and perhaps there is room for further investigation of the participants perspectives.

A number of participants felt they had learnt at least a little about discussion in an online environment, although this was not very marked.

These results fit with what the general expectations were before the online discussion tasks were carried out. In the analysis of the pre-task interviews, we saw that most participants did not expect their ethical positions to change although they hoped to gain from the experience in media analysis. They also expected to learn little of the technology.

The interaction thus fulfilled most expectations about learning. What is surprising though, is the extent to which participants became aware of the differences between the various ethical positions and the manner in which they developed the distinctions between ethical and textual analysis and the different uses of media texts for ethical discussion. The online work exhibited Piagetian and Vygotskian characteristics, both in the act of writing reviews

and the discursive interaction. Broadly, the ethical positions were subject to Piagetian learning and the textual analysis was subject to Vygotskian learning.

6.2 Intra and Inter-Dyadic Interaction

Interview questions on dyadic interaction elicited varying responses (see Table 2, Appendix D for a summary). The first dyad recognised that their interaction via the message-board had little educational content and this was put down to work pressures on the part of one dyad member. The second dyad highlighted the difference between the styles of online interaction, although this asymmetry was valued as a strength:

> Interviewer: "would you say you learnt much about your partner's ethical perspective?"
> Farah: "some, yes. It was quite different to me"
> Interviewer: "how?"
> Farah: "probably more critical. Not in a negative sense. More sceptical than me too."
> Interviewer: "do you think that was good or bad?"
> Farah: "I think it was good, it was healthy. That's alright"

The third dyad gave mixed responses, with one member noting that that the interaction lost momentum because of the asynchronous nature of the medium, event though they had numerous face-to-face meetings, (which were important to both dyad members). The fourth dyad (represented by only one member interview) felt the interaction was not challenging enough and that the moderator should have intervened to provoke further debate.

The dyads, to a large extent, lacked any awareness of the activity of other dyads and thus missed out on a major advantage of CMC interaction according to McConnell (1994). This was largely the author's fault:

> Isabell: "Actually I was more interested in what other people said about Forrest Gump, because it's my topic…"
>
> Interviewer: "so you were reading other people? More interested in other people?"
>
> Isabell: "because I think Richard and I think Farah had a bit of conflict there"
>
> Interviewer: "why didn't you junp in?"
>
> Isabell: "I wanted, but I didn't know I was allowed. Then when I got your message 'feel free', it was already too late"

This might explain why those dyads (the second and fourth) held that their interaction had broadly failed, where failure was constituted as a lack of messages, whereas in fact they were the most successful in terms of the Educational and Engaging content of their messages and the average word-count per message. This would indicate that if interaction were limited to that between only the original partners, the frequency of interaction would be seen as the criterion of success, rather than the quality of interaction, (given by the educational and engaging content).

6.3 Online Interface and Navigation

Much of the participant's interaction with the message-board and web site was generally marked by confused navigation, despite going through training beforehand (see Table 3, Appendix D for a summary). Areas of confusion included posting messages and accessing message boards and partner's profiles.

> Farah: "On more than a couple of times I had trouble getting into it, because I'd keep hitting the wrong things and I'd come up with a product."
>
> Also…
> Interviewer: "the message board system was such that you had a message board per review. Was that useful in terms of structuring things?"
> William: "it was, it was, no, because my partner didn't delete, when she responded to a message she didn't delete it, and I – when you read an internet screen you scan it you don't read it – and I would miss her one line responses I would miss, thinking 'oh, what is she trying to do?' in fact, there is only probably one message there, and all the rest are repeated."

Buckingham Shum and Sumner (1998) recommend using multiple threads to help responses build on each other whilst avoiding confusion. However, in this case, it was the threading itself that caused the confusion, so perhaps such blanket recommendations are a bit too simplistic and not addressed in enough detail in the literature.

On the whole, they did not feel it necessary to elaborate on their personal details in their profiles, due to the asynchronicity and short nature of the discussion. They felt that a more synchronous discussion would require a greater level of comfort and intimacy, which would be facilitated by more detailed personal descriptions. The paradigm case of this might be an actual face-to-face encounter. Also, a number of participants felt that personal

details, especially the photograph, may have actually biased the discussion, and would have preferred knowing as little about their partner as possible.

> Interviewer: "you didn't write much description of yourself. Any reason for that?"
> Isabell: "I just didn't know what to say. I didn't see any reason why we had to describe ourselves like that. I think you could be influenced by those things".

The participant's comments would indicate that the level of comfort, or intimacy required, (in this case determined by the amount of detail provided in the participant's profiles), is a positive function of the synchronicity, length and professionalism of the interaction. That is, the more synchronous, the greater the length and the more professional the context, the greater the need for personal details to be known by the interlocutors. This stands in relation to McConnell's model of online environments, which are described in terms of synchronicity, location and structuring (1994, p 28). This model would seem to lack the dimensions of professionalism and overall length of the task, which have been shown to be crucial, at least in terms of forming a sense of intimacy, or comfort level.

The participants generally felt that the structured nature of the interface – especially the reviews – made them easier to write and a number of them saw it as a clear case of scaffolding.

> Richard: "it's not a bad framework to get started in. it gave you starting points"
> Interviewer: "did you feel like it was scaffolding you?"
> Richard: "potentially yes. Yes definitely"

Also, the scaffolding provided by the moderator in the act of writing the reviews seemed to be very useful. It is not known however to what extent this scaffolding contributed to the length and depth of the reviews or whether the scaffolding would have been similarly appreciated if the activity had continued for some length. This would seem to contradict McConnell's recommendation

(1994) for unstructured interaction, but would seem to confirm Wegerif's advice (1998) to move from a structured to a more unstructured form of interaction. For example:

> Jenny: "…what might have been a good idea would be to set pieces to talk about…and then setting up a timetable of replies…then I think we might have written less but we would have kept up to that schedule."

6.4 Comparison of Web Conferencing to Other Mediums

The message-board environment and web site generally was seen as a partially-public platform by most participants (see Table 4, Appendix D for a summary). Whilst they were aware of a limited audience, which consisted of the dyads, the moderator and the MA course supervisor, they had minimal awareness of the potential global audience. However, even this limited sense of audience still encouraged them to pay attention to presentational details such as spelling and grammar and even to forming arguments in a way appropriate for an audience beyond the dyad. In particular, the permanence of the participant's contributions was highlighted.

> Interviewer: "did it [the sense of audience] ever influence how you wrote?"
> Richard: "yes. Grammar and spelling mostly and constructing an argument that would be understood by other people."

The asynchronous nature of the message-board was seen as having the advantage of encouraging the participants to reflect on the issues and be more elaborate in their messages and reviews.

> Interviewer: "[…] do you think face-to-face is superior to this online discussion?"
> Denilson: "I don't think it is superior, I think it's different. In face-to-face, you have the advantage of non-verbal things. In online discussion, you have the advantage of your analysis being more elaborated"

The non-private nature of the interaction clearly influenced the formality of both the language used and the way in which ideas were articulated online. Whether such greater formality is necessarily a positive thing has not been answered by this research. This is reflected in McConnell, who highlighted that the structured and permanent nature of CMC interaction encourages more focussed and detailed messages (1994, p. 73).

Face-to-face may have too many confusing opinions and would require a certain amount of confidence, which some participants thought would be inhibitive, although more fluid and spontaneous. These concerns regarding prejudice and group anxiety in face-to-face environments are reflected in McConnell (1994) and Wegerif (1998) who consider the avoidance of such problems to be a major advantage of CMC interaction. However, the lack of expressive power of the medium was highlighted by one participant:

> Interviewer: "do you think language is important in this online environment?"
> Denilson: "uh, huh. It's a way of expressing and using only text there is no expression"

As McConnell explains, the lack of verbal cues in text based CMC environments is a major disadvantage and greatly limits the expressive power of the medium (1994, p. 81). Wegerif also points to inhibiting effect of the lack of facial expression in CMC environments, when trying to create a rational discussion (1998).

Online chat, if the participants are comfortable with each other and are focussed enough, was seen as possibly providing a better alternative to message-boards. Without focus though, online chat could be open to abuse and used as a platform for trivial (constituted as off-topic) discussion.

> Interviewer: "do you think chat, like Yahoo messenger would have been better for ethical discusison?"
> Christa: "I think it could be, but between people that already know each other otherwise they wouldn't say much"

> Also…
>
> Interviewer: "do you think if you were in a chat room, that would be more appropriate for this kind of ethical discussion?"
>
> Denilson: "no. because if it's an expert discussion, I think it requires a little bit more thought […] Sometimes you might write things that you don't endorse?"
>
> Interviewer: "so…frivolous?"
>
> Denilson: "yes, well unless people are self-conscious and they wanna focus on a particular subject and also there is a moderator like a lecturer. I think that would be possible to have a discussion – an organised and productive one."

In terms of the relative merits of the various discursive mediums (web, conferencing, email lists, online chat and face-to-face), each was seen as offering both advantages and disadvantages. Whilst asynchronous platforms (web, conferencing, email) allowed for more elaborate single articulations, synchronous mediums (online chat, face-to-face) were seen as more fluid, though more open to 'abuse' (constituted as domination or intimidation). It would seem a combination of media may be the most fruitful solution for a given length and level of professionalism of the activity, although future research would be needed to see just how these different media might be integrated to compensate for the weakness of each other.

6.5 Critical Success Factors

The lack of time was seen as the most important critical factor in deciding the degree of progression of the dyads, as we see in Table 5 (Appendix D). Not only did some participants feel that it took too long to get back to each other's messages, but that they did not start early enough and spent too much time deciding what media text to analyse.

> Interviewer: do you think I was asking too much of the participants?
> Richard: potentially yes, because of who you chose to participate in the study. All of us were students and all of us were working on other projects that might have limited our participation

The time allotted for the online element of this study was clearly not enough. Participants were in the midst of pressing academic work and this is by far the most important reason for the relative lack of interaction within and between dyads. As Wegerif (1998) and Buckingham Shum and Sumner (1998, p. 139) point out, long pauses between messages in online settings act against the construction of a online discursive environment. CMC participants also suffered from a 'weak' sense of time and there is often no sense of 'lateness' or 'earliness' (McConnell, 1994, p. 73). Others felt pressured by the time frame which Buckingham Shum and Sumner point out as detracting from a good online debate (1998, p. 139). This, coupled with the long delays between messages allowed discussions to grind to a halt:

> Interviewer: "…do you think that is a weakness of having a one-to-one [discussion]"
> William: "of course, yes. If one person for whatever reason has to sit out, take a back seat, the discussion does grind to a halt"
> Interviewer: "because it did grind to a halt at some stage."
> William: "to be honest, I don't think it ever really got going. And I think this was entirely due to – and I was put off by this, I enjoyed this sort of activity – was the time. If you'd conducted this in September, I would have responded a lot more, I would had more time. I'm sure everyone will say that."

The difficulty in deciding an appropriate media text was also related to feeling the need to find a text of common interest, regardless of the pedagogic nature of the setting. The participants advised that having a common interest and an interesting partner that made an effort to engage them in discussion was important to the quality of their interaction. The setting was far too reliant on their abilities to self-organise in the early stages in terms of selecting a relevant text to discuss. The freedom given was clearly at the expense of timely interaction.

A couple of participants recommended a more structured interaction. One noted that in her dyad (a Piagetian setting), both members were waiting for each other to start the interaction. In the absence of clear expert, the 'first-mover' problem was pronounced, as was the need for a starting point or subject for the discussion. A detailed schedule of posting messages was recommended as a way of seeing more frequent, though perhaps less detailed messages, which would at least have kept up momentum.

> Farah: "maybe had I been the one instigating and not waiting for him to do that, maybe it would have gone further. We were probably both waiting for something to happen. I was very unsure as to when we were supposed to really start?"

The inappropriate level of early scaffolding of dyadic interaction by the author, coupled with a confusing interface and instructions consumed valuable time early on, which in turn further confused the participants and frustrated a number of early attempts at Engaging and Educational interaction.

7 Conclusion

7.1 Addressing the Research Question

This study was motivated by comparing a number of different positions regarding the democratising potential of the Internet. Briefly, the 'cyberenthusiasts', were optimistic regarding the realisation of types of interaction approximating Habermasian Ideal Speech and Enlightenment rationality, online. However, we saw that Habermas himself argued that technology operates according to a logic that seeks to dominate rather than emancipate, reducing all decisions to questions of efficiency. Poster agreed that Ideal Speech would not likely be realised online, but that democratisation was still possible, largely due to the constant and competitive flux of ideas, communities and identities brought about by the radically decentralising technology that is the Internet.

In order to investigate the democratising potential of online interactions, I aligned the 'cyberenthusiast's' position with that of Habermasian Practical Discourse and Poster's positions with Rorty's postmodern Ironic Discourse. Further, the question of authoritative relations and approaches to moral development served to problematise the pedagogic setting, thus generating my research hypothesis:

A Piagetian approach to pedagogy will encourage a more modernist form of ethical discussion, as characterised by Habermas' Practical Discourse and a Vygotskian approach will encourage a more postmodern form of discussion, as characterised by Rorty's Ironic Discourse.

We can see from the foregoing analysis of the message and review content that there are a mix of different modern and postmodern positions being held by different participants and even by the same participants. These positions are very subtle, and it is questionable whether we really can make such

delicate distinctions, given the lack of discussion content. Indeed, any conclusions regarding the participant's ethical approach (i.e. modern or postmodern) *must be seen as highly speculative*. Given the weight placed on the author's rather personal interpretation of these discussions, these results can be seen as a reliable indicator of the author's personal perspective only, and not much more.

However, if we accept the interpretation of the ethical positions, then we can see that all those settings that were initially constituted as Piagetian displayed a predominantly modernist ethical disposition. We can also see that all those settings that were initially constituted as Vygotskian displayed a predominantly postmodern ethical disposition. The situation can be summarised in the table below:

Dyad	Initial Setting	Final Setting	Interaction	Role Fulfilment	Ethical Position
Dyad One	Piagetian	Vygotskian	Dominance	Expert failure	Modern
Dyad Two	Piagetian	Piagetian	Equality	Peer-Conflict success	Modern
Dyad Three	Vygotskian	Vygotskian	Dominance	Expert failure	Postmodern
Dyad Four	Vygotskian	Vygotskian	Equality	Expert success	Postmodern

Table 1 Summary of Pedagogic and Ethical Positions

The conclusion is still problematic however. The first and third dyads were seen to have engaged in a less successful discussion than the second and fourth dyads, calling into question the reliability of their discussion as data. The first dyad also changed the *de facto* final status of its setting, from Piagetian to Vygotskian giving two Vygotskian settings, one displaying a predominantly modern ethic and the other a postmodern ethic. The correspondence given in the initial research hypothesis, between a Piagetian setting and a modern ethic and between a Vygotskian setting and a postmodern ethic would thus seem to be highly questionable, being supported only be the second and fourth dyads.

It was tempting though perhaps naïve, to try and categorise the participants so clearly. What we find instead are complex threads running through, which can be analysed in terms of modern, postmodern, cognitive and social

constructivist positions. The main findings are given below, along with a reflection on methodological issues, design recommendations and possibilities for future and related work.

7.2 Peer Relations

In the pre-task interviews a contradiction emerged between the participant's pre-existing unwillingness to accept feedback and criticism of their ethical positions and their stated requirement for open-minded debate. It is likely that each participant saw themselves as experts, but only *in relation to their own positions and no-one else's*. With each as their own expert, they could demand that others not try to dominate and force their opinions. Each would at once be 'open', or at least tolerant of the views of others, yet expect their own positions not to change. This was most likely due the participants all being *social peers*[18]. Thus the dialogue between peers was not to be for the purposes of rational consensus, but rather for edification only – it was to be a postmodern dialogue. Another explanation is that open-minded debate was possibly viewed as a tool for pedagogic instruction, of the apprentice by the expert, the latter being what each participant constituted themselves as.

Before the task, the participants positioned themselves as equals in terms of media analysis and technology to avoid social dominance in what was a seen as an interaction among *social peers*. Thus, they were acting as 'newcomers', or 'outsiders' (Wegerif, 1998, p. 14).

Although the Piagetian task was difficult to get going, it was more in line with how the participants saw each other – as *social peers*. The Vygotskian task was easier to get going as it did not require co-ordination of the media text, but the interlocutors were not willing to apprentice or be apprenticed. Instead they related the media texts to ones they already knew, thus making the setting more equal.

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[18] Had the partners included the Pope of the Dalai Lama for example (or even Bill Gates or Madonna for that matter) just how 'closed' would the participants have remained to their ideas?

Lack of dominance regardless of pedagogic setting, and avoidance of an 'expertise vacuum' (that is, where the 'apprentice' contributes their own expertise) in a Vygotskian setting were critical factors in determining the 'quality' (a word I use with caution) of dyadic discussion. Two dimensions of interaction were modelled in the online environment – the Educational-Administrative and the Engaging-Distancing. This provided a framework for establishing to some extent the 'quality' of the interaction[19]. Those with the highest 'quality' engaged in good online debate incorporating social conflict, whereas the others were limited to 'mere' online articulation, itself valuable.

7.3 Limitations of Models of Interaction

The intimacy, or comfort level, required by the online interlocutors was seen to be a positive function of the synchronicity, length and professionalism of the interaction. Professionalism connotes a non-social peer relationship (though not necessarily a hierarchical one). Thus, the diminished need for creating a sense of online intimacy or comfort level can be seen as due to the participants being *social peers*. Also, online interlocutors required, at least in the early stages of asynchronous interaction, extensive scaffolding both of the setting and the activities involved. These findings contradict recommendations (McConnell, 1994) for early unstructured interaction and highlight the limitations in models of CMC environments that focus only on dimensions of synchronicity, location and structure (McConnell, 1994, p. 28) including multiple threads (Wegerif, 1998).

Linear models of progression (such as Salmon's, 2000, p. 36 and Bonk and King's 1998, p. 195) proved problematic as some participants 'jumped' between stages, which suggests caution with regard to their application and possibly a motivation for greater refinement/extension of these models.

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[19] This notion of 'quality' should also include issues of word-counts (average per message and total including reviews and profiles), the number of messages, level of unfamiliarity of material presented, degree of mutual knowledge construction, lack of social dominance and degree of social conflict.

In the pre-task interviews, there was an existing unresolved tension between the participant's view of ethical *analysis* as belonging to the expert domain (that is, being currently beyond their Zone of Proximal Development), and of ethical *discussion* as residing within the realm of interaction characterised by a lack of social dominance.

7.4 Critical Success Factors

The lack of time was the over-riding factor determining the success or failure of the online portion of the study. The participants were given two weeks to complete two tasks, each in a different pedagogic setting, when in fact they should have been given at least four weeks. Another major factor was the greater than expected need for early structuring of the interaction, especially to decide the relevant media text. The long pauses between messages, 'weak' sense of time and pressured time frame were all pointed to by the models of online discussion in the literature as inhibitors to the success of interaction.

Also, it seems that even before the onset of the empirical online discursive task, the participants expected little success. They didn't expected to learn much in an online, asynchronous environment, but perhaps a little about the environment itself.

The frequency of interaction was held as an important criterion of success by the participants, possibly due to the lack of inter-dyadic interaction, by which the participants missed out on a major advantage of CMC interaction.

The learning expectations set out in the pre-task analysis were generally met. The participants learnt about different ethical positions, textual analysis techniques and the practice of online discussion, but without adopting their partner's positions, which is not to say that they were not successfully apprenticed into their partner's positions.

Web conferencing of the type used in this study was seen as partially-public, yet even the limited sense of online and offline audience encouraged elaborated articulations and attention to spelling and grammar. This seems to confirm the link between structured, permanent interactions and elaborated messages. It also highlights the advantages of CMC as avoiding face-to-face prejudice and group anxiety, as well as the disadvantage of lacking expressive power.

7.5 Methodological Issues

7.5.1 The Experimental Method

This study made use of experimental methods to investigate the relationship between a number of concept variables. These were the Practical and Ironic ethical discourse types and the Piagetian and Vygotskian pedagogic settings. This relationship was generated before the empirical interaction, which took place in a specifically designed laboratory – the online conferencing environment. A pre-task-post-task approach was used to judge the impact of the intervention.

Hindsight allows me to question the wisdom of this approach. A great deal of time was spent before any empirical work generating an operationalisable hypothesis from the literature. This is open to charge that the various alignments I made between concepts were in fact very forced.

The pre-task-post-task interviews served, in my view, to apprentice the participants into a particular way of thinking and talking about ethics and values – my way. It is very difficult trying to subtract the influence of the interviewer after the fact.

Also, the experimental nature of the study required me to control for a number of variables, such as age, gender, status, ethnicity, language, experience, interests, availability and academic field and progress, some of which were more difficult to control than others. Ultimately, the social reality of the

participants as peers was foregrounded, thus rendering the author's attempt to generate an artificial hierarchy only marginally effective.

Perhaps an ethnographic approach would have been more feasible, especially logistically, although of course that has it's own problems, such as finding participants within a similar enough field of discussion, for example.

7.5.2 Operationalisation

The time frame allowed for the study was far too short. This calls into question the reliability of the data used. At least four weeks, and ideally longer, should have been set aside.

The tasks, settings and concepts used were all overly complex. Largely this was the result of the necessary pre-coding of the concept variables during the literature review. The web site was somewhat confusing and the tasks required far too much on the part of the participant's understanding, to be operationalised. The author made an unwarranted assumption before the empirical intervention with respect to the degree of understanding and acceptance of crucial terms, such as 'ethical analysis', 'textual analysis', 'media text', 'Piagetian setting' and 'Vygotskian setting'.

The focus of discussion was also highly problematic. There was a requirement for self-selection on the part of the participants, sometimes requiring coordination before 'real' discussion could take place which proved very difficult.

The media texts themselves were not explicitly ethical, in comparison to a parable, or a moral dilemma for example. It was thus unnecessarily difficult to draw out ethical interpretations. The participants engaged to a large extent in textual analysis, rather than ethical analysis, though some thought the former involved the latter, and this was largely as a result of using texts drawn from entertainment media.

Also, the author emphasised the use of ethical analysis, rather than other forms of political-values discussion. This, we saw had a very particular meaning for the participants – that of being largely irrelevant – and hence had an impact on the study.

7.5.3 Generalisability, Reliability and Validity

This was a very specific sample and a very particular setting and so not very representative of a more general sample. It may be representative perhaps of postgraduate students conducting political/values discourse in an online conferencing environment, but given the need to control for so many variable (outlined above) and the questionable degree to which this was accomplished, one should be wary of applying these results other similar samples.

The analysis of the dyad's discussions are highly subjective and as such the reliability of any conclusions relating to the correspondence between pedagogic setting and ethical disposition, as ventured in the research hypothesis, are highly questionable. To what extent the coding of the data could have been carried out with more reliability is also questionable. This is perhaps the most important argument in favour an ethnographic approach, rather than the experimental approach that was employed by the author.

There was questionable validity of the alignment between positions of relative optimism regarding the democratising potential of the Internet and the ethical discourse types. Was Rorty's Ironic Discourse the correct or only possible postmodern discourse type? Zygmunt Bauman (1992) for example may provide an alternative, but which would possibly emphasise more the lack of authority, problematising the alignment of the Piagetian setting with Ideal Speech. Also questionable was the Piagetian-Vygotskian distinction as a valid indicator of the equality-hierarchy distinction. Would it have been better to look as Pedagogic versus Exchange relationships instead (Dowling and Brown, 1999, Online)?

7.6 Design Issues

These points relate to the design of the web site (viewreviews.com) and as such serve as guiding principles for others when constructing similar settings.

Face-to-face meetings and self-descriptions were very important both for feeling comfortable ('bonding') and for early co-ordination of tasks, the latter especially due to the 'weak' sense of time and scheduling online. These events helped move the participants from being 'outsiders' to 'insiders'.

When the media text was the same, those interlocutors that had divergent opinions generated an engaging discussion. When the text was different and unknown, only those texts that were highly rated generated interest from the partner to the discussion

Review sub-sections were useful in scaffolding the review writing process and in eliciting sharper opinions from the participants, which in turn facilitated a more engaging discussion. The structured environment provided numerous opportunities for Entry level events (of initial and repeated information presentation) (Bonk and King, 1998), which the participants took advantage of to provide focussed and elaborated interactions.

Film seemed to be the easiest and most productive kind of media text to use for discussion, probably due to the greater expressive power of the non-verbal cues, compared to books, music and computer games.

The dyads sought to 'pack-in' as much as they could per asynchronous message, rather than make individual messages more focussed and explicit.

Interlocutors respond more to direct engagements with their contributions by their dyadic partners than to administrative appeals for greater activity.

7.7 Future and Related Work

7.7.1 Future Work

It was not known to what extent the scaffolding contributed to the length and depth of the messages and reviews or whether the scaffolding would have been similarly appreciated if the activity had continued for some length (that is, whether the scaffolding may have been considered patronising, for example).

Also, Future research would be needed to determine how interaction types (face-to-face, chat, mailing lists and conferencing) might be integrated to compensate for the weaknesses of each other and what educational contexts are more naturally aligned with what communicative technologies.

7.7.2 Related Work

Fountana (2001) carried out an ethnographic study of postgraduate students' interactions in an online discursive asynchronous environment. Her findings suggest that the pre-existing social peer relationships served to structure online interaction such that hierarchical, or authoritative relations were very difficult to establish. This is confirmed by my findings, which point to the importance of accounting for social peer relations between online interlocutors. However, her findings also suggest that for productive online interaction, good social relations are crucial, whereas my findings point to the inhibiting effects of intimacy (generated either face-to-face or online) on online debate. Clearly, further work is required to account for these contradictory findings.

Cheung (2001), in her study on the use of CMC environments to support second language learners found that authoritative relations between the language learners were very difficult to establish because they considered themselves to be peers, rather than teachers. Again, this is borne out by my findings as well as Fountana's, above. She also points the importance of offline communication as a means of enhancing mutual understanding and

decision making.   Whilst my findings support the role of face-to-face interaction for decision making (deciding the media text, for example), I would argue that offline interaction would actually diminish the quality on online understanding, perhaps due the social conflict nature of the interaction in my setting. As with Fountans's conclusions, further work is required to model and achieve an understanding of online interaction that would incorporate such differing contexts.

Appendix A – Operationalisation

1. Operationalisation of the Pedagogic Settings

2. First Email to Participants – Outline for Participants

3. Second Email to Participants – Tasks for Ethical Discourse

4. Step-by-step Instructions for Tasks

Operationalisation of the Pedagogic Settings

The Piagetian environment was defined as having the following characteristics that the participants were required to observe:

1. The interaction is one of **equality** between the participants, not domination or control.

2. Participants are encouraged to express themselves coherently and to **provide feedback**, without any form of coercion.

3. They should employ 'formal' thinking, (abstract, rational, logical, decontextualised) which will, as far as possible, avoid vague intuition and opinion. The model for this kind of thinking might be what's commonly (but perhaps falsely) regarded as 'classical', theoretical **scientific thinking**.

4. They are concerned here with the development of their **own understanding**, not their partner's. They should see their partner as a resource, there to assist them in their development. Thus, they should:

   i.   Question the other about their position, but for their own clarification.

   ii. Respond to questions about their position, again with the aim of self-clarification.

   iii. Clarify their own understanding of the partner's position, (if required), on the basis of the partner's response.

   iv. Present their position in relation to their partner's in as clear and coherent a way possible, drawing out the similarities and differences, that is, perform and analysis of their position with respect to their partner's.

5. This interaction will be auto-regulated (**self-organised**), with equal levels of participation from both partners.

The Vygotskian environment is defined as having the following characteristics that participants are required to observe:

1. As the instructor, participants are required to establish their **expertise** regarding the ethical issues conveyed by the media text. They will develop an initial position, displayed in their review, (as an example, considering a particular industry code of practice that they may be familiar with, or a

philosophical framework). As the student, participants are required to actively assist the instructor to provide them with the right kind of 'scaffold', or framework for development.

2. As the student, participants are required to 'model' their instructor. The instructor will provide **contingent feedback** and help, inversely related to their progress – the greater the progress, the lesser the assistance. The instructor will use methods such as instruction, questioning and cognitive structuring (methods to assist conceptualisation, e.g. metaphors, analogies, examples etc.)

3. The instructor should employ **'situated' thinking** (concrete, contextualised, reified, e.g. ethical dilemmas, thought experiments and rich descriptions of situations) to instruct/convey ideas, which will be appropriate to the students level of development, i.e. not too advanced but not too basic. The instructor is also encouraged to pay attention to, and take advantage of, the historical experiences of the student. The model for this kind of thinking might be more socially determined, practical knowledge (praxis), rather than abstract, theoretical thinking described in the previous setting.

4. Both members of the pair are concerned here with the development of **the student's understanding**, not the instructor's. The student should see the instructor as a resource, there to assist the student in their development. Thus:

   i. The instructor should question the student about the instructor's position, but for the student's clarification

   ii. The student should respond to the instructor's questions, again for the student's clarification.

   iii. The student should question the instructor about the instructor's position, for the student's clarification.

   iv. The instructor should respond to the student's questions with the aim of the student's clarification.

   v. Present their position in relation to your partner's in as clear and coherent a way possible, drawing out the similarities and differences, that is, perform and analysis of their position with respect to your partner's.

vi. The student should present their position as an increasing approximation to the instructor's own position, in as clear and coherent a way as possible. The instructor will assess the level of adoption of their position by probing the student with questions, scenarios or dilemmas, to which the student will be expected to correctly apply the instructor's ethical position.

5. This **'scaffolded' interaction** will be organised by the teacher in active collaboration with the student.

First Email to Participants - Outline for Participants

Hello all,

This is the first email regarding the use of the Internet (viewReviews.com) for writing product reviews as part of my MA empirical work.

Thanks for offering to take part. For those that have forgotten, viewreviews.com is a web site that allows people to write reviews of books, music, film (DVD & Video), electronics, computer games and software. It also allows readers to respond to reviews using the message boards and to build up a dialogue.

The aim of the reviews is to draw out the ethical and moral values you think are represented by the particular product you review.

The time schedule will be as follows:
Number of tasks - 2
Overall time - 20 days...10 days per task.
Start date (probable) - 4th June
End date - (probable) - 24th June

All of you now have been trained in the use of the web site. The participants are:
Denilson Gomes - Social Justice education
Christa Popadou - ICT in education
Farah Parvez - Philosophy of education
Richard Taggart - ICT in education
Jenny Loren – Policy Studies
William Burgess - ICT in education
Isabell Sintra - Media Studies
Jack Bergman - ICT in education

I will wipe out all training work done to date on the website, so there will be a fresh start on June 4th. If anyone needs any information/further explanation please email me.

The next email will provide instructions on the various tasks and a reminder on the signup/review writing process.

Once again, thanks a lot for taking part.

Best regards,
Zaeem

Second Email to Participants - Tasks for Ethical Discourse

Task 1: **(approximately 1 week)**

The participants will be divided into pairs as follows:

Setting A

1. Denilson (Male, MA Social Justice education) & Nikki (Female, MA ICT in Education)
2. Farah (Female, MPhil Philosophy of education) & Richard (Male, MA ICT in Education)

Setting B

1. Jenny (Female, MA Policy Studies) & William (Male, MA ICT in Education)
2. Isabell (Female, MA Media Studies) & Jack (Male, MA ICT in Education)

Task 2: **(approximately 1 week)**

The participants will be divided into pairs as follows:

Setting A

1. Jenny (Female, MA Policy Studies) & William (Male, MA ICT in Education)
2. Cecelia (Female, MA Media Studies) & Jack (Male, MA ICT in Education)

Setting B

3. Denilson (Male, MA Social Justice education) & Nikki (Female, MA ICT in Education)
4. Farah (Female, MPhil Philosophy of education) & Richard (Male, MA ICT in Education)

Setting A:

This setting is based on broadly Piagetian pedagogic principles. The aim is to attempt to generate cognitive conflict within the participants, in order to facilitate the development of the participant's cognitive/ethical schemas.

Participants will be required to write one review each on the **SAME** media text as their partner. Remember, you can choose from any type of text - books, film, music, games or software.

Your initial position will be expressed in the review you <u>each</u> write. You will engage in discussion with your partner about their position using their review's message board. Do not change your review once written, as it is a record of your starting position.

You should use the media text as inspiration for the initial review and the ensuing discussion – as a tool to focus your thoughts on a particular ethical issue and motivate discussion. Rather than focusing on what you consider to be the position of the text or the author, consider instead the issues posed by the text. You should aim to create a position that can be **open to question**, that is, one that doesn't seek to avoid controversy.

A Piagetian environment is defined as having the following characteristics that you are required to observe:

6. The interaction is one of **equality** between the participants, not domination or control.

7. You are encouraged to express yourselves coherently and to **provide feedback**, without any form of coercion.

8. You should employ 'formal' thinking, (abstract, rational, logical, decontextualised) which will, as far as possible, avoid vague intuition and opinion. The model for this kind of thinking might be what's commonly (but perhaps falsely) regarded as 'classical', theoretical **scientific thinking**.

9. You are concerned here with the development of **your own understanding**, not your partner's. You should see your partner as a resource, there to assist you in your development. Thus, you should:

vii. Question the other about their position, but for your own clarification.

viii. Respond to questions about your position, again with the aim of self-clarification.

ix. Clarify your own understanding of their position, (if required), on the basis of their response.

x. Present your position in relation to your partner's in as clear and coherent a way possible, drawing out the similarities and differences, that is, perform and analysis of your position with respect to your partner's.

10. This interaction will be auto-regulated (**self-organised**), with equal levels of participation from both partners.

The aim is not necessarily to resolve contradictions and conflicts to reach consensus. Diverging positions are fine as long as the partners can understand each other's positions from a more inclusive, higher level of abstraction. You will need to demonstrate a clear, coherent understanding of the other's position.

The end point will be of 'equilibrated' (adjusted) cognitive models of ethical issues – you may still have the same (diverging) positions, but you will also have acquired a more abstract position with which to describe each other's positions.

(Special Note: Although I use terminology such as 'conflict', I do not intend to promote a mindless squabble! Rather, I am using it in the technical sense of referring to a rational engagement of differing positions.)

I will set up a meeting with each pair to discuss and select the media text to be reviewed and to clarify the requirements.

Setting B:

This setting is based on broadly Vygotskian pedagogic principles. The aim is to attempt to develop a 'scaffold' (an appropriate and changing level of instruction/assistance) for participants/students, to facilitate development to a 'higher' level of ethical understanding, (which, being weakly institutionalised, will be the instructor's).

The participants will be required to write one review each on a **DIFFERENT** media text from their partner. Remember, you can choose from any type of text - books, film, music, games or software.

First, one partner will be the instructor and will write a review. The student will interact with the instructor using the instructor's review's message board. Instructors should not change their review once written. Half-way through the task, when I give the signal, you will swap round and the other participant in the pair will then become the instructor, and the procedure will be repeated with discussion revolving around the new instructor's review.

You should use the media text as inspiration for the initial review and the ensuing discussion – as a tool to focus your thoughts on a particular ethical issue and motivate discussion. Rather than focusing on what you consider to be the position of the text or the author, consider instead the issues posed by the text. You should aim to develop a position that you will then **apprentice** your partner into, who will be your 'student'.

A Vygotskian environment is defined as having the following characteristics that you are required to observe:

6. As the instructor, you are required to establish your **expertise** regarding the ethical issues conveyed by the media text. You will develop an initial position, displayed in your review, (as an example, consider a particular industry code of practice that you may be familiar with, or a philosophical framework). As the student, you are required to actively assist the instructor to provide you with the right kind of 'scaffold', or framework for development.

7. As the student, you are required to 'model' your instructor. The instructor will provide **contingent feedback** and help, inversely related to your progress – the greater the progress, the lesser the assistance. The instructor will use methods such as instruction, questioning and cognitive structuring (methods to assist conceptualisation, e.g. metaphors, analogies, examples etc.)

8. The instructor should employ **'situated' thinking** (concrete, contextualised, reified, e.g. ethical dilemmas, thought experiments and rich descriptions of situations) to instruct/convey ideas, which will be appropriate to the students level of development, i.e. not too advanced but not too basic. The instructor is also encouraged to pay attention to, and take advantage of, the historical experiences of the student. The model for this kind of thinking might be more socially determined, practical knowledge (praxis), rather than abstract, theoretical thinking described in the previous setting.

9. Both members of the pair are concerned here with the development of **the student's understanding**, not the instructor's. You should see the instructor as a resource, there to assist the student in their development. Thus:

  v. The instructor should question the student about the instructor's position, but for the student's clarification

  vi. The student should respond to the instructor's questions, again for the student's clarification.

  vii. The student should question the instructor about the instructor's position, for the student's clarification.

  viii. The instructor should respond to the student's questions with the aim of the student's clarification.

  xi. Present your position in relation to your partner's in as clear and coherent a way possible, drawing out the similarities and differences, that is, perform and analysis of your position with respect to your partner's.

  xii. The student should present their position as an increasing approximation to the instructor's own position, in as clear and coherent a way as possible. The instructor will assess the level of adoption of their position by probing the student with questions, scenarios or dilemmas, to which the student will be expected to correctly apply the instructor's ethical position.

10. This **'scaffolded' interaction** will be organised by the teacher in active collaboration with the student.

The aim is to bring the student to a 'higher' stage of development, ultimately a stage of independence from the instructor.

The end result should produce a student capable of an independent demonstration of the ethical position (either abstract/rational or contextual/situated) developed by the instructor.

<u>I will set up a meeting with each pair to discuss and select the media text to be reviewed and to clarify the requirements.</u>

Step-by-step instructions for tasks

This is a list of explicit, operational instructions for you all to follow. Please let me know if you need any clarification.

1	Signup.	Remember to click the link in the email to confirm your account.
2	Enter personal details.	Try and make this detailed. Most of you have not met each other before, and discussing ethical issues with total strangers can be weird! So try and include a photo if you have one.
3	Enter list of products	Enter a list that you would like to discuss. Do this by writing a review for each book, but using only one or two words for the description and positive and negative features. DO NOT WRITE FULL REVIEWS YET, since you will discard all but two reviews.
4	Choose the media products.	Go to your partner's list of reviews and try and select two media products. You can find your partner by using the search box at the top. You will need to select: a. one media product you both know, for Setting A. b. one media product you don't know, for Setting B. Specify which product by communicating with your partner using the message board. If you can't select anything, use the message boards to suggest more products.
5	Task 1.	For Task 1, the following pairs will be in Setting A: a. Denilson & Christa b. Farah & Richard And the following pairs will be in Setting B: a. Jenny & William b. Cecelia & Jack You should have selected an appropriate media product. Now is the time to write your full review of the product, 1. Log in 2. Go to "Write Your Reviews" 3. Go to "Add a New Review" 4. Look up your media text details (name, producer, category etc.) on Amazon.co.uk if you need to

5. Write your review of the media product (both of you if in Setting A, or just the instructor if in Setting B), using the product as an inspiration/motivation/example for drawing out ethical issues:

6. Proceed to interact with each other using the message boards, in a manner dependant on the setting you are in.

The description of Setting A and Setting B has been given in a previous email. Please let me know if you don't have it.

| 6 | Continue until my signal | Continue discussion until I signal to move to Task 2 (after about 1 week), or until I signal to swap instructor/student roles (only if you are in Setting B) |
| 7 | Task 2 | For Task 2, the following pairs will be in Setting A: |

For Task 2, the following pairs will be in Setting A:

a. Jenny & William

b. Cecelia & Jack

And the following pairs will be in Setting B:

a. Denilson & Christa

b. Farah & Richard

You should have selected an appropriate media product. Now is the time to write your full review of the product,

7. Log in

8. Go to "Write Your Reviews"

9. Go to "Add a New Review"

10. Look up your media text details (name, producer, category etc.) on Amazon.co.uk if you need to

11. Write your review of the media product (both of you if in Setting A, or just the instructor if in Setting B), using the product as an inspiration/motivation/example for drawing out ethical issues:

12. Proceed to interact with each other using the message boards, in a manner dependant on the setting you are in.

The description of Setting A and Setting B has been given in a previous email. Please let me know if you don't have it.

Appendix B – Tabular Summary of Pre-task Dyadic Positions

1. Experience with Technology
2. Experience with Ethical Analysis and Discussion
3. Experience with Media Texts and Analysis
4. Expectation of Change of Ethical Position
5. Expectation of Learning

Tabular Summary of Dyadic Positions

Denilson	Intermediate.	Situated – work.	Indirect – sales
Christa	Intermediate/expert.		Direct – multimedia
Farah	Beginner/intermediate.	Situated – school.	Indirect – teaching
Richard	Intermediate.	Situated – school.	Indirect – teaching
Jenny	Intermediate.	Situated – work.	Indirect – sociology
William	Intermediate.	Situated – school.	Indirect – teaching
Isabell	Beginner – 'bad'		
Jack	Intermediate/expert.	Situated – work.	Direct – web design

Table 1 Experiences with Technology

Denilson	Formal – body of literature.	Discussion – reason more than emotion.	Driven by philosophy and science.	Required scaffolding.
Christa	Informal – pervasive.	Little discussion – personal decisions, public manipulation.	Driven by spirituality, art and science.	
Farah	Informal – contextual practice.	Discussion – non-imposing dialogue.	Driven by art, philosophy, spirituality and science.	
Richard	Informal – 'beer ethics'.	Discussion – equal speech.	Driven by spirituality and science.	
Jenny	Formal – expert codes-of-conduct.	Discussion – expert-led collaboration.	Driven by philosophy and science.	Required no scaffolding.
William	Formal – academic analysis.	Discussion – grounded justification.	Driven by science.	
Isabell	Formal – Greek virtues.	Discussion – avoids judgement.	Driven by spirituality and science.	
Jack	Formal – expert theory.	Discussion – well-argued case.	Driven by art and science.	

Table 2 Experience with Ethical Analysis and Discussion

Denilson	Understands little, beginner, though critical	Range – little
Christa	Beginner understanding, expert.	Wide range.
Farah	Intermediate understanding.	Moderate range.
Richard	Intermediate understanding, not expert.	Little range.
Jenny	Intermediate understanding,	Wide range.
William	Beginning understanding, not expert.	Wide range.
Isabell	Intermediate, not expert.	
Jack	Intermediate understanding.	Little range.

Table 3 Experience with Media Texts and Analysis

Denilson	Self-secure, others-secure.	Open mind.	
Christa	Self-secure, others-less secure.		Discussion - argue.
Farah	Self-secure.	Open mind.	Discussion - dialogue.
Richard	Self-secure, others secure.	Open mind.	Discussion-debate.
Jenny	Self-less secure, others-less secure.	Open mind.	Discussion-challenge.
William		Open mind.	
Isabell	Self-secure.	Open mind.	Discussion-experience.
Jack	Self-secure, others-less secure.	Open mind.	Discussion-debate.

Table 4 Expectation of Change of Ethical Position

Denilson	Others-views.	Technology-little, vs. online chat.	Media – little.
Christa	Others-engage.	Technology-from others.	Media-from others.
Farah	Others-engage.	Technology-online discussion.	Media-from self.
Richard	Others-views.	Technology-vs. Face-to-face.	Media-little.
Jenny	Others-views.	Technology-vs. Face-to-face.	Media-from others.
William	Others-views.	Technology-online discussion.	Media-analysis application.
Isabell	Others-engage.	Technology-little.	Media-from others.
Jack	Others-engage.	Technology-little.	Media-little.

Table 5 Expectation of Learning

Appendix C – Tabular Summary of Online Dyadic Interaction

1. Summary of the Participant's Profiles
2. The Reviews Written by the Participants
3. Description of the Content of Interaction by Dyad
4. Number of Words and Messages by Dyad
5. Profile, Review and Message Wordcount by Dyad

Tabular Summary of Online Dyadic Interaction

Participant	Email	Age	Gender	Total Display	Date Joined	Description	Reviews
Denilson	N	Y	Y		15/6	5 words	3
Christa	Y	N	Y		16/6	10 words	1
	1	**1**	**2**	**4**		**15**	**4**
Richard	N	N	Y		14/6	1 word	1
Farah	Y	N	Y		14/6	5 words	1
	1	**0**	**2**	**3**		**6**	**2**
William	Y	N	Y		13/6	0 words	2
Jenny	Y	Y	Y		15/6	107 words	4
	2	**1**	**2**	**5**		**107**	**6**
Isabell	Y	Y	Y		16/6	15 words	1
Jack	Y	Y	Y		18/6	27 words	2
	2	**2**	**2**	**6**		**42**	**3**

Table 1 Summary of the Participant's Profiles

Review	Reviewer	Image	Rating	Link	Price	Gen.	Pos.	Neg.	Total	Msgs	Category
The third way and its critics	Denilson	N	Good	N	7.55 GBP	40	9	25	74	0	Books
The age of extremes	Denilson	Y	Excellent	Y	13 GBP	51	4	8	63	0	Books
Water Filter	Denilson	N	Good	N	7.99 GBP	29	6	18	53	0	Books
'Requiem for a Dream'	Christa	N	Excellent	Y	119.99 USD	56	31	17	104	5	Film
Forrest Gump	Richard	N	Average	N	11.99 GBP	64	30	25	119	0	Film
Forest Gump	Farah	N	Excellent	N	12.99 GBP	73	41	27	141	5	Film
Mississippi Burning	William	N	Excellent	N	N/A	237	18	31	186	5	Film
Traffic	William	N	Good	N	N/A	3	0	0	3	0	Film
Captain Corelli's Mandolin	Jenny	N	Good	N	3.33 GBP	11	3	7	21	0	Books
Don Giovanni	Jenny	N	Excellent	N	25.99 GBP	9	17	27	53	0	Music
The House of Mirth	Jenny	N	Poor	N	18.99 GBP	11	12	42	65	0	Film
Brother	Jenny	N	Excellent	N	3.50 GBP	307	182	58	548	2	Film
Black & White	Isabell	N	Excellent	Y	39 USD	103	140	150	393	3	PC Games
2001: A Space Odessey	Jack	N	Excellent	N	31.99 GBP	87	30	67	184	5	Film
Romeo and Juliet	Jack	N	Excellent	N	N/A	12	1	1	14	0	Film

Table 2 The Reviews Written by the Participants

Messages	Writer	Date	Time	Delay	Words	Engaging/ Distancing	Educational/ Administrative
'Requiem for a Dream' 1	Zaeem	20/6	13:00		39	Engaging	Administrative
'Requiem for a Dream' 2	Denilson	21/6	14:07	Medium	40	Engaging	Administrative
'Requiem for a Dream' 3	Denilson	21/6	14:10	Short	28	Engaging	Administrative
'Requiem for a Dream' 4	Christa	23/6	19:07	Long	44	Distancing	Administrative
'Requiem for a Dream' 5	Denilson	23/6	21:14	Short	80	Distancing	Educational
Forest Gump 1	Zaeem	20/6	12:30		86	Engaging	Educational
Forest Gump 2	Richard	20/6	12:47	Short	54	Engaging	Educational
Forest Gump 3	Richard	26/6	12:50	Long	139	Engaging	Educational
Forest Gump 4	Farah	29/6	23:39	Long	378	Engaging	Educational
Forest Gump 5	Farah	29/6	23:47	Short	56	Distancing	Educational
Mississippi Burning 1	Jenny	15/6	11:49		15	Distancing	Administrative
Mississippi Burning 2	William	15/6	11:57	Short	10	Engaging	Administrative
Mississippi Burning 3	Jenny	20/6	00:12	Long	34	Distancing	Administrative
Mississippi Burning 4	William	20/6	10:11	Short	11	Engaging	Administrative
Mississippi Burning 5	Jenny	22/6	10:31	Long	9	Distancing	Administrative
Brother 1	William	23/6	10:02		153	Engaging	Educational
Brother 2	Jenny	6/7	9:30	Long	47	Distancing	Administrative
Black & White 1	Jack	18/6	11:25		8	Engaging	Administrative
Black & White 2	Zaeem	20/6	12:36	Long	44	Engaging	Administrative
Black & White 3	Jack	23/6	22:09	Long	100	Distancing	Educational
2001: A Space Odessey 1	Isabell	27/6	10:10		22	Engaging	Administrative
2001: A Space Odessey 2	Jack	27/6	12:21	Short	297	Engaging	Educational
2001: A Space Odessey 3	Isabell	3/4	10:09	Long	124	Engaging	Educational
2001: A Space Odessey 4	Jack	4/4	00:04	Short	135	Distancing	Educational
2001: A Space Odessey 5	Isabell	4/4	17:54	Medium	36	Distancing	Administrative

Table 3 Description of the Content of Interaction by Dyad

Dyad	Admin.	Educ.	Eng.	Dist.	Words	Messages	Average	Face-to-Face Meetings
Denilson	2	1	2	1	148	3		
Christa	1	0	0	1	44	1		
	3	**1**	**2**	**2**	**192**	**4**	**48**	**0**
Richard	0	2	2	0	193	2		
Farah	0	2	1	1	434	2		
	0	**4**	**3**	**1**	**627**	**4**	**157**	**1**
William	2	1	3	0	174	3		
Jenny	4	0	0	4	105	4		
	6	**1**	**3**	**4**	**279**	**7**	**40**	**3**
Isabell	2	1	2	1	182	3		
Jack	1	3	2	2	540	4		
	3	**4**	**4**	**3**	**722**	**7**	**103**	**0**

Table 4 Number of Words and Messages by Dyad

Dyad	Profile Words	Review Words	Messages Words	Total Words
Denilson	5	190	148	343
Christa	10	104	44	158
	15	**294**	**192**	**501**
Richard	1	119	193	213
Farah	5	141	434	580
	6	**260**	**627**	**793**
William	0	189	174	363
Jenny	107	687	105	899
	107	**876**	**279**	**1262**
Isabell	15	393	182	590
Jack	27	198	540	765
	42	**591**	**722**	**1355**

Table 5 Profile, Review and Message Wordcount by Dyad

Appendix D – Tabular Summary of Post-task Dyadic Positions

1. Expectations and Learning Achievements
2. Intra and Inter-Dyadic Interaction
3. Online Interface and Navigation
4. Comparison of Web Conferencing to Other Mediums
5. Critical Success Factors

Tabular Summary of Post-task Dyadic Positions

Denilson	Experience did not meet expectations. Didn't learn about textual or ethical analysis. Did not learn about online discussion. But found a use for the sight when searching for books. Also, wanted to watch the film reviewed by Christa. Did not learn about textual analysis.
Christa	Ethical perspectives were not changed. Learned more about other people's different ethical perspectives. Learnt little of the technology apart from constructing a "brilliant site". Learnt about media texts and analysis. Learnt what ethical analysis is.
Farah	Ethical perspectives not changed but "it made me see things differently". Learnt more about online discussion because "that was a new ballgame to me". Used text as a motivation for discussion, rather than as an authority. Their discussion was more ethical than textual, but thought that "it kind of seems connected anyway".
Richard	Ethical position did not change, though he learnt how different his partner's position was. Learnt more about media analysis, but not about ethical analysis. Considers textual analysis to have a necessary ethical dimension. Distinction between high-brow and low-brow. Distinction between text as starting point and text as authority. Learnt about the difficulty of criticising others.
Jenny	It was more difficult discussing online than she expected. She learnt how different her partner's view was. Learnt about online discussion, since she had never done one before. Distinction between high-brow and low-brow texts. Distinction between the ethics of the text and the ethical issues raised in the text. Textual analysis was inherently ethical, though not vice versa.
William	He learnt a style of writing from Jenny appropriate for online environments. He learnt his contribution was "equally as valid as hers". Surprised at how little he had in common with Jenny. High-brow, low-brow distinction with 'Jurassic Park', with high-brow more appropriate for ethical discussion. Taught William to be more critical. Ethical analysis "was the hard part", compared to textual analysis. Did not make the distinction between the ethics of the text and the ethical issues raised by the text.
Isabell	She didn't change her position, just made to think about ethical considerations. Made a distinction between a text as motivation and as authority. Distinction between ethical and textual analysis. Distinction between describing the text and looking for meaning in it. She now feels more comfortable using online technology. She now wants to see the film discussed by her partner.

Table 2 Expectations and Learning Achievements

Denilson	Partner was a "bit busy in her course". Non-administrative message was an attempt to try and start a discussion. If more people, then a moderator may be required. A dyad is naturally more focussed.
Christa	Could not contribute to her partner – her lack of time. She used his profile details to view him romantically! Thought he was a "very interesting guy".
Farah	Partner's perspective was more critical and sceptical, though not in a negative sense. Didn't think they wrote enough, although that was not partner's fault. My first message was useful because it got things going, although she was surprised at my involvement. Never really saw Richard's profile.
Richard	He was deliberately antagonistic and cynical. His partner was sentimental. Partner's contributions were appropriate, though, like him, not very frequent. His partner "actually made me think…it was quite useful". Limited by time. Initial meeting may have been detrimental since it's "easier to argue…without actually knowing the person". My first message was a useful starting point.
Jenny	If responses are not quick enough, the discussion can lose momentum. Response times were so long that she forgot the original message. The interaction was not really a dialogue, rather posting for the sake of it. She needed to meet her partner face-to-face, in order to keep the momentum going. There was confusion about the topic of discussion. She spoke about the ethics of the text, and her partner spoke about the ethical issues raised by the text. They spent a lot of time deciding on the text, rather than discussing.
William	Partner was such a good writer it was almost intimidating. Her expertise was due only to having a different, rather than more advanced experience and the barrier eroded very quickly. Face-to-face meetings were important for William. Pleased to be paired with Jenny as they "get on quite well". He looked at other reviews.
Isabell	Did not want to achieve a consensus as she thought his opinion was wrong. She didn't felt they challenged each other enough, due to time. Wanted to join in other discussions, but thought she wasn't allowed to. More partners in the discussion might have been useful. Needed further provoking by the moderator.

Table 2 Intra and Inter-Dyadic Interaction

Denilson	Thought interface was "quite good […] visually very fast". Got confused when posting a message.
Christa	Lack of profile – lack of her confidence. Image in the review – 'image worth 1000 words'.
Farah	Trouble getting into the review because of confusing links. Wasn't sure how much to write for her profile. Useful having a photo only if the discussion was ongoing, or professional. She thought the image of the media text was less important than the written content. Didn't know how to post to her partner's message board.
Richard	The interface limited the amount he felt appropriate to write. Used her profile as a guide for how much to write in the profile. Photograph was perhaps useful. Interface scaffolded his contributions. Access to the actual reviews and messages was confusing.
Jenny	William' lack of profile content was not an issue, as she knew him. She wrote a lot because she had time and "the more you know about someone […] the better". Structured of reviews make them easier to write. She got a bit lost in the navigation. The message doubling was a bit confusing.
William	Wasn't aware of the requirement to write about his background on the profile. Message board repetition made it difficult to see new messages. Review structure was helpful. Looked at other dyadic discussions.
Isabell	The personal photos may have introduced a bias into the interaction. She felt the interface was structured but that gave her direction. She would prefer not to know about them, or see them. She didn't see any reason why she had to describe herself.

Table 3 Online Interface and Navigation

Denilson	Face-to-face is different, not superior. Has advantage of non-verbal communication. Message-board has advantage of "analysis being more elaborated", although it makes you more careful, rather than more thoughtful. Considered partially public – open only to the group (similar to 'public and private' that Christa said). Chat may be not amenable to the extra thought that expert interaction requires and hence may be more frivolous, unless the participants are focussed.
Christa	Sense of audience – gave responsibility "not to write crap". Personal and public at once, unlike a mailing list. Face-to-face may have too many opinions. Text provides time to think and reflect. Chat possibly better if people are comfortable with each other.
Farah	Not too aware of other people, although aware of the task requirements. Not worried that her contributions were public. Face-to-face is more spontaneous and more fluid. Can change position more easily.
Richard	Aware of my moderation and artificialness of the tasks. Considered audience to be only the group (partially public). Influenced his use of grammar, spelling and construction of an argument intended for public consumption. Mailing lists may be better for small groups and specific issues. Asynchronous discussion has the advantage of a written record that can be used for reflection before articulation. Because the message board was permanent, it required more thought. A chat room might be useful if it was a small group discussing a particular topic.
Jenny	Awareness of the moderator and other people and tutors looking at the contributions, though not aware of a global audience (partially public), although it was not conscious. Face-to-face is not so good at getting writers to elaborate positions and as you are writing "you discover you think something about a film without being aware of it before". But for the discussion, face-to-face would have been better.
William	Bypassed online discussion for face-to-face meetings. Chat-rooms can be very flippant, where spelling and grammar do not matter. He took a lot of time over posting to the message board. A chat would have been better for the discussion since William was looking for prompts and to be engaged by the expert. A message-board was fine for textual analysis though.
Isabell	Sense of a group, rather than a fully public audience (partially-public). Thought about the course supervisor. The sense of audience encouraged her to pay attention to her use of language. Chat could be useful of the topic is specified and if the members know each other. She would not have confidence in a face-to-face environment.

Table 4 Comparison of Web Conferencing to Other Mediums

Denilson	Time was crucial. He would need to find the topic interesting.
Christa	Critical factors were having a starting point/subject, an interesting partner and interaction/dialogue.
Farah	Both were waiting for the other to start.
Richard	The time it took to get back to each other and not starting early enough.
Jenny	A more structured interaction may have seen them writing a little very often. Took a long time deciding what to write, trying to find an area of common interest.
William	His interest in the subject matter itself. The discussion never really got going because of time.
Isabell	The conception of what ethics is was "too pushy". The question of time was very important – she felt we needed more time to make it really interesting.

Table 5 Critical Success Factors

Appendix E – Example Pre-task Interview Transcripts

1. Pre-task Interview Questions

2. Richard Pre-task

3. Christa Pre-task

Pre-task Interview Questions

<u>Read instructions beforehand</u>?:

<u>Date</u>:

<u>Time</u>:

<u>Name Last, First</u>:

<u>Gender</u>:

<u>Age</u>:

<u>Course</u>:

<u>PT/FT</u>:

<u>Location</u>:

<u>Home Internet access</u> Y/N:

Previous experience with (e.g. technology; ethical issues and discussion (art, philosophy, spirituality, science); media texts and analysis):

Their understanding of the requirements of the study:

- <u>Aims</u>

- <u>Setting</u>

- <u>Tasks</u>

The media text to be used:

Expectations regarding (e.g. change of ethical perspective of oneself or others; learn more about other's ethical views; learn more about the Internet/technology/online discussion; learn more about texts and their analysis):

Richard Pre-Task Interview Transcript

Conducted: 12/6/01

Others Present: Farah

Z. right Richard. What kind of previous experience have you had with technology?

C. what kind of previous experience have I had with technology?

z. yeah – would you say you were a beginner, or intermediate or advanced – an expert?

c. I would say I'm intermediate – how does that sound?

z. what kind of previous experience have you had? – programming, using Office software…

c. just using applications…not really any programming.

z. you've used it to teach children, or…?

c. yes

z. alright, so do you have a PC at home as well?

c. yes

z. and you use it pretty much every day?

c. uh huh.

z. ok, um, what kind of previous experience have you had with discussing ethical issues…in the public environment, perhaps?

c. none

z. right…(repeating) no…previous..experience…with…

c. not in any formal sense anyway…

z. formal or informal, actually

c. you mean like ethical discussions between people like over a pint of beer?! – that sort of thing?

z. even that…

c. well, I mean, that happens.

z. and what motivates that kind of discussion? would it be something…conflict?

c. hmmm

z. okay. And do you attempt to resolve that conlict, or are you quite happy to live with differences?

c. oh, I'm quite happy to live with differences…as long as my differences are expressed…I mean, if I disagree with you on an ethical issue, I want to get across my point of view, but I wouldn't necessarily want to make you engage with my point of view.

z. to engage but not to accept?

c. yes

z. okay. Have you ever come across ethical or values issues when it comes to art, perhaps?

c. yes.

z. what kind of experience was that?

c. (pause)…well, for instance when I was doing art history, sort of issues of ahh…the ethical issues in modern art…for instance ahhh…ummm…like picasso's ummm…

z. guernica?

c. …use of african imagery in his art.

z. and what was so ethical…what kind of issues were raised about that?

c. well, the issue of primitive art versus western art…

z. right, okay.

c. the issue of, you know couching something as 'primitive', raises ethical issues.

z. okay, great. Have you ever approached ethics from a philosophical point of view?

c. well, I took a course in philosophy.

z. okay.did you…philosophical ethics…or anything like that?…political philosophy?

c. it was course in philosophy, so yes, ethical issues were raised. But that was a long time ago.

z. OK, a long time ago. Do you remember how you felt about at the time?

c. oh it was very interesting. I did a reading of a movie – the Fisher King – as part of that philosophy course.

z. that's Robin Williams, right?

c. robin williams and jeff bridges, yes. Directed by terry gilliam.

z. right…and that was part of the philosophy. Was it part of the ethics or part of the aesthetics?

c. it was ethics and philosophy…it was sort of look at his transformation throughout the movie from icon to his falling out of grace to his transformation back into a human being.

z. robin williams' character.

c. no, jeff bridges character.

z. okay, so falling from grace…

c. he falls from grace by (pause) yeah. The whole movie is shot…for instance he is always shot from above at the beginning of the movie…sort of he's *above* human beings, he lives in a skyscraper *above* human beings, he's sort of this figure beyond any ethical ummm…he can say whatever he wants, he's on the radio – he's a DJ – and eventually what he says causes him to fall from grace. He's shot from below then eventually he's above again…he's redeemed.

z. so, standard sort of redemption story?

c. uh huh.

m. what's the name of that film again?

c. the fisher king

m. ohhh.

z. (pause) does that strike a chord with you Farah?

m. I haven't seen it, but I like it, from what I hear about it. So I have to go and see it! (laughs)

c. so it's all about redemption and…umm.

z. have you ever approached ethical issues from a spiritual perspective, ummm spirituality or religion for example…including, form mysticism to religion…all of those?

c. yeah

z. okay, in what sense?

c. these are hard questions!

m. laughs

z. you don't have to answer, of course (laughs)

c. naturally you have to approach ethics from…spirituality is necessarily part of it…to most people. I mean, most people base their ethical outlook on some sort of spirituality.

z. right, okay. Is that how it is for you as well?

c. no

z. right, okay.

c. but then again, how can it not be? It's prevalent…most philosophies…it's impossible to escape! Whether you are religious or not, ethics is always going to come back to that sort of religious spirituality, I think.

z. as a means of grounding? As a means of justification?

c. it's used as a means of justification, but it is also just so *prevalent*.

z. but in you own internal thoughts about ethics, would it return to spirituality?

c. no. but any external debate, I think is going to be involved in spirituality.

z. have you ever approached ethical issues from a scientific point of view?

c. yeah.

z. like what?

c. umm. The use of human embryos in disease research. I mean I'm not personally involved in that but it's still an issue that when I was teaching life sciences, that sort of issue needs to be addressed. The whole issue of physics and nuclear weapons – that whole issue came when I was teaching.

z. so you were a science teacher.

c. yes.

z. okay. And how did you approach those issues with the kids.

c. I tended to raise the issue as a question and never try to resolve it. My philosophy was as a teacher, it's not my job to teach ethics, it's more my job to raise ethical issues so that they're aware that there are these issues, and that they need to examine and build their own position on these issues.

z. that's great. In terms of media and media texts – what kind of experience do you have with that?

c. just with the examination of films.

z. what kind of examination…

c. for instance, I took a class on horror films and the examination of what horror is an what it means to be horrified, and images of adolescence in films.

z. right. and how long ago was that?

c. probably 8-7 years ago.

z. so would you say that you know basically how to analyse a text?

c. no!

z. you don't?

c. no!

z. why not? I mean you gave a pretty good analysis of the fisher king.

c. but it was sort of from an ignorant stand point. I mean I didn't have a specifiic umm..what's the right word – epistemological maybe?…viewpoint that I was analysing it from.

z. okay – that's word is too long for me to write! (laughs)

c. I'm not even sure if I'm using the right word! (laughs)

z. so why do you say that was from an *ignorant* standpoint? As a reader of the text, don't you think your standpoint has relevance.

c. well, but is should be based on some sort of theoretical positioning, and I didn't really have any theoretical positioning in analysing the text.

z. okay. But you know pretty much how to get off the ground – if someone asked you to analyse something, whether with theory, without theory, you'd be able to produce something?

c. sure.

z. do you know which media text you will be using?

c. no idea. I thought we had to decide that between the two of us.

z. that's fine. Do you think you have a general understanding of the aims of this research?

…

discusion of aims

z. yeah, I'd say you've pretty much got it.

…

discussion of setting and tasks

z. what are your expectations in terms of changin your ethical perspective..either of yourself or of others?

c. I don't think I have any expectations. I wouln't thin k that it was necessary that ethical perspectives are gonna change.

z. are you expecting to learn more about the other person's point of view?

c. yeah I imagine that will happen, but I've no expectations that positions will change – they may.

z. are you expecting to learn much about the technology…

c. no.

z. …involved

c. actually it would be interesting to see… I would think that a more direct debate…without the mediation of the computer would bring up more issues or allow for clearer arguments and a better chance of stances to change than with the computer between them.

z. okay. Why's that?

c. just because of distance and time. Because this is gonna be a drawn out…it's gonna be posting and responding, posting and responding. I just think that..and with the written word it's.

z. right. Do you expect to learn more about media texts and their analysis.

c. possibly.

z. right! That's pretty much it! So has that been useful?

c. yep. Very useful.

Christa Pre-task Interview Transcript

Conducted: 13/6/01

Others Present: None

z. what kind of experience do you have with technology – would you say that you are a beginner, or an intermediate or advanced?

n. it depends on the definition of technology…computers and all that stuff?

z. how would you define it?

n. technology in general?

z. yep.

n. well, my definition of technology…just thinking about it…is everything that concerns human tools. So technology might be machines for a factory, it could be computers it could be a combination of the two together.

z. and in terms of computer technology, how would you…

n. again, it depends! (laughs). Comparing to greece, I'm an advanced level, but comparing to the situation here, I would say that I'm medium and comparing to america, I would say I'm a beginner. I'm always complicated, my answers…sorry about that..

z. no, don't be sorry. Okay, what kind of stuff do you use on the computers…do you use programming?

n. actually, I'm not a programmer – I'm just using programs to create something. Programming is too complicated and too boring for me.

z. so you use applications.

n. yep.

z. what kind of applications do you use?

n. applications for text, images and sounds and the combination of altogether. It could be Director or Flash or web based editors.

z. okay great. In terms of ethical issues and discussion of ethical issues…

n. …concerning the internet, or?…

z. ethics full stop. What kind of experience do you have in terms of that. Do you have any formal experience or example?

n. I don't exactly understand what you mean by ethical issues, erm, is it about good or bad things?

z. what would your meaning be?

n. erm, since the word is greek it might be a different definition. It might be the ability to distinguish good from bad. the english definition is the same?

z. pretty much, yeah. It's kinda hard to give a really strict definition of it – a whole area of philosophy is devoted to that question itself.

n. I know. And who is going to decide the right and the bad and all that stuff?

z. I guess for this purpose it's really up to you.

n. it's very difficult!

z. yeah, it's very difficult. I mean ethics can mean a number of different things. I'm interested in the way that ethics prioritises aome things over others.

n. yeah, and that means making decisions upon specific paths and avoiding something else.

z. absolutely.

n. yeah! I have the same opinion!

z. how much exposure do you have wuold you say to ethical issues?

n. if you think about the decisions of everyday life, I think that everysignle thought is a decision. Whatever we think, wherever we are, whatever we do is an ethical issue. The gap between thought and action.

z. and have you ever approached ethics from an artistic point of view?

n. let's say, from a political ethical point of view, yes.

z. so have you ever done a course on aesthetics, or art theory where you approached…

n. …no I haven't…I've done some paintings concerning some situations that are a bit difficult to get rid of them.

z. so you've used art to express certain ethical feelings, issues, intuitions…

n. think of the one I gave to paul, it's about the internet and some words are 'downloading' 'signup' 'personal data' which are ethical issues.

z. hmmm. What wuold you say is an ethical issue in that?

n. we have to distinguish the point of vie – the corporate and the user. If you see a flashing image all the time you are going to sign up! It' brainwashing!

z. so it's kind of manipulation?

n. yeah, of course it is!

z. so you notice them, draw them out and express them in artistic means.

n. yeah.

z. do you ever use art or literature as an inspiration or a motivation for talking about ethical issues?

n. the latest site is 'requiem of a dream' site. It is about manipulation…it's a magnificent site. You can see the way people are manipulated by companies and all that stuff.

z. and it looks at manipulation – corporate manipulation?

n. yes.

z. and so a website has inspired you

n. yeah, in away yes. And the way they constructed the site…the flashes 'you are the winner!!' you have to see it – I can't explain!

z. sure. Have you ever used philosophy to discuss ethics or have you ever been motivated by philosophy?

n. not really. If you're talking about books, not really. I haven't got time to read! Very interested, but you know the situation?

z. sure. Even before the Masters?

n. years ago yes., but not recently. I don't remember a thing about Kant.

z. how do you feel about ethics and spirituality. Does spirituality play a part?

n. I think they are incorporated in one another – you can't think about ethical issues without spirituality. Because…

z. what do you mean by spirituality?

n. the ability to distinguish between aspects of the same thing. what do you mean?

z. some people mean God, some people mean religion, some people mean a sense of something greater…a holistic approach, almost like an environmental…

n. I would prefer the last one (laughs)

z. and you were saying you can't get away from it?

n. if you're talking about ethical issues, one way or another we've been brainwashed…either in school or family or environment or whatever. And again, I'm not sure whether it's god or bad. it could be anarchy without that. You never know.

z. so how does spirituality inform your ethical thoughts?

n. following the holistic approach – everything is interconnected – I'm not going to do something that would do harm to something else, and again if I do, the reaction would be towards me again.

z. have you ever approached ethical issues from a scientific point of view. Does science motivate ethical awareness? Ethical dilemmas?

n. I think so, yes. The clones for example. Should we clone people or not? Or should we pollute the environment to make Pentium 100's or not? Should we fill in the space with garbage in order to go to other galaxies, or not?

z. that's interesting – you've compared pollution to Pentiums and you've compared garbage to space rockets.

n. yeah, they are connected.

z. it's interesting that you've taken a technology and drawn out the negative environmental impact of these technologies.

n. if we think of the good ones, we have to think of something else.

z. when you think about ethics, do you think about it in scientific terms? And example would be psychoanalysis.

n. is it! This is fiction zaeem! This is not science!

z. or pseudoscience!. Some would say there is no such thing as good or bad – there is just the id or the ego or the superego.

n. well, you know that freud used to take cocaine, so I'm not sure…

z. and do you ever refer to science when you talk about ethics? For example evolution – survival of the fittest?

n. not really. I think evolution is in our head, not outside.

z. so you have a specific conception of evolution.

n. I've created a whole system!! It's a little difficult to explain right now.

z. that's great. So. How about media texts and media analysis? What kind of past experience do you have with that?

n. again, you have to define media analysis.

z. textual analysis, in terms of the experience you have in terms of watching a book or reading a film and then analysing it?

n. well, I always do that!

z. okay.

n. that's my problem. it could be the photography, the direction, the scenario, combination, comparison with other films…y'know, I always do that.

z. do you limit your analysis to films?

n. no, I would say I analyse everything.

z. like what for example?

n. like the dissertation.

z. in terms of media texts?

n. it *is* a media text!

z. but books…do you analyse software?

n. erm..you mean evaluate or something? Analyse?

z. do you ever think software has an ethical message?

n. yeah, you are forced to use a specific…you cannot do anything you want, just whatever the programmer allows you to do, right?

z. right, we're nearly done. I just want to find a bit about your expectations. Do you think that this will change your ethical perspective? Will you change other people's ethical perspective?

n. I think that we are old enough not to change it (laughs). No what I mean? I think that we are too old to change our opinion. If someone tried to change my opinion would take a long time. He has to prove it. He has to have some really good points in order to convince me.

z. so you don't think that you would be able to change somebody else's ethical perspective even?

n. I don't think that somebody else might change mine, but I'm not sure that I won't change someone else. It's different. I might can.

z. do you have an expectation about learning more about other people's ethical views?

n. yeah, sure, definitely. So…have more arguments.

z. so you think you will be arguing with other people?

n. yeah, sometimes I argue, just to argue. Even if I believe whatever they say, sometimes I say the opposite, to create an argument! (laughs)

z. do you expect that you will learn more about the internet or more about technology generally, or about online discussions?

n. I don't know. Probably. I don't know. It depends upon the other person. Actually I could get bored of the other person in five minutes!

z. …if they're not interesting…

n. yeah, it depends upon the other person. If they are interesting I will be keen to learn.

z. right, and do you expect that you will learn more about media texts and their analysis?

n. sure, since I didn't even know what a media text is.

z. erm, in terms of as I said earlier…you analyse films.

n. that term, ok, sure.

z. so you will learn more about it?

n. yeah

z. okay. Who will teach you?

n. the other person. Not actually teaching, but interacting.

z. okay. So not through teaching but more through interaction?

n. you know, teaching is a bit…different..

z. it's not through *explicit* interaction.

n. yeah! You know!

…

Appendix F – Example Post-task Interview Transcripts

1. Post-task Interview Questions

4. Richard Post-task

2. Christa Post-task

Post-Task Interview Questions

1. Expectations: were they met?

2. Partners and others: how did they feel about the interaction and contribution

3. Reviews & Profiles: any points of interest? Images, structure, content

4. Messages: any points of interest

5. Interface: structure of review, categories, message-board per review, navigation.

6. My participation: as moderator? Interfering?

7. Motivation/language distinction: how did they use various knowledge domain?

8. Ethical/textual analysis: were they discussing ethics or media?

9. Published to the world? Did they have a sense eof audience?

10. Viewreviews vs mailing list vs F2F vs chat: how did viewreviews stand up, for ethical discussion?

11. Reasons for progression/lack of: can they pinpoint critical factors/events?

12. Any suggestions for future improvements?

Richard Post-Task Interview

Conducted 12/7/01

Others Present: None

z. your expectations for this experiment – were they met?

c. I didn't know I had any expectations. I think *you* had expectations! I was just there participating.

z. you had no expectations that ethical positions would change?

c. no.

z. right. Did your ethical positions change?

c. no.

z. did you learn more about the other person's ethical position?

c. yes. That they were…quite different from mine, at least in dealing with the one movie that we reviewed. They were quite markedly different.

z. in what way?

c. just in our analysis of the movie.

z. did you find her analysis sentimental? Peachy?

c. yes.

z. okay. How would you characterise your analysis?

c. antagonistic and cynical.

z. deliberately?

c. yes.

z. why's that?

c. just because I thought it would be more interesting to raise issues that could be argued.

z. did you learn more about online discussion?

c. I don't know, I hadn't thought about this.

z. did you feel you learnt more about media analysis?

c. just based on this? yes. It was fun thought just to do some.

z. it was fun? Okay. What about the ethical analysis – did you learn more about ethical analysis?

c. no.

z. did you consider that to be fun at all?

c. it would be difficult to do media analysis without doing ethical analysis, don't you think? Can you separate the two? In analysing the media, aren't you necessarily having to have an ethical position?

z. possibly.

c. I wasn't really separating the two. Your questions is separating the two.

z. okay. How did you feel about your partner?

c. what do you mean by feel?

z. did you consider them to make appropriate contributions?

c. yes. I don't think that they necessarily contributed frequently, although I wouldn't say I contributed overly frequently.

z. so you could have done more?

c. yes, I think we both could have done more.

z. right. What do you think of the content of her contribution?

c. her initial contribution, I didn't think too much of, but when she finally responded to some of my questions about her position, I think that actually made me think…it was quite useful.

z. okay.

c. she only responded once to stuff I'd written about her review, and when she finally did I thought that was…it could have been more interesting if I'd had time to respond to that.

z. now your' previous experience in ethics, technology and media analysis, did that have any bearing? Was that a factor?

c. well, because of the limited space in the environment, it was tough to support your views. So, you were just making statements without offering to support your statements.

z. just because you didn't want to take a lot of time to do it, and you felt limited by the amount of space you could use. It just didn't seem like it was appropriate to write a whole lot..

z. so literally the size of the text box.

c. possibly, yeah.

z. was that for the message or for the review?

c. both. And even in the review it said '4-5 lines about this'. So you were kinda limited in what you were gonna say.

z. even though that was 4-5 lines minimum?

c. yeah, because you feel like 4, 5 lines and I'm done.

z. okay. How did you feel about Farah's profile? She didn't write an awful lot about her actual profile.

c. well, neither did I, so I didn't think anything of it.

z. have you ever met her offline?

c. yes…only when you interviewed me.

z. did you feel the image of her photograph was important or useful?

c. I suppose it gave a face to the person you're talking to, so it was useful.

z. do you think it was perhaps detrimental, in that you knew what she looked like – you knew she was a woman?

c. no, I don't think it was detrimental. Perhaps meeting her initially was detrimental.

z. why was that?

c. because, maybe it's easier to argue through the computer as the mediator, without actually knowing the person.

z. meeting her gave her a face…humanised her?

c. yeah. The picture really didn't, because in that sort of environment, I could stick a picture up of my brother and you still wouldn't know…I could pretend I was a woman writing reviews. So it gives you a certain amount of anonymity.

z. so you think anonymity is important?

c. I think it's useful in environments like that, at times.

z. in terms of the reviews, how do you feel about the structure of the reviews, how it was divided up into positive, negative, that sort of thing.

c. it's not a bad framework to get started in. it give you starting points.

z. did you feel like it was scaffolding you?

c. potentially yes, yes definitely.

z. but at the same time it cramped you style a bit, I suppose, by limiting how much you could write?

c. yes. And given that people don't want to read a lot online. They don't want to read long messages and long pieces of work online.

z. now you started off in the Piagetian task. So your job was to find something similar to talk about – the same media product. How did you achieve that?

c. I think we decided during the interview what we would talk about.

z. you wrote something about Forrest Gump, but she didn't post a message to you r board. Is there any reason for that?

c. potentially, she may not have been able to find it. I don't know if she ever read it. The only time she responded was to stuff I'd written on her message board.

z. I wrote the first message on that board. Do you think that was useful?

c. yeah.

z. do you think that was necessary?

c. I wouldn't say it was necessary, but it gave a starting point for me to write…because I think I responded to your message before I responded to Farah's actual review.

z. how aware were you of my participation? Was I invisible to you, or were you quite aware?

c. oh no, I was quite aware, because you were posting.

z. did that affect what you wrote?

c. well, given that the whole thing was kinda artificial, yeah. Essentially because we were given a task, everything affected what I wrote. I'm doing this task for a specific purpose, so I'm gonna try and do it in a certain way.

z. do you think I interfered too much, not enough? Did I structure things too much, not enough?

c. I think the structuring was fine. I didn't think of it as interfering, when you got involved. And your presence wasn't to such an extent that all communication stopped. You didn't feel you were being watched.

z. do you think I was asking too much of the participants?

c. potentially yes, because of who you chose to participate in this study. All of us were students and all of us were working on other projects that might have limited our participation.

z. did you ever make a distinction between media texts used as motivation to discuss ethics and media texts used as a language as themselves, for instance, Jurassic park might be used as motivation, but you would hardly use Jurassic Park in any authoritative sense when discussing ethics.

c. are you making a distinction between using Jurassic Park as a starting point and using Jurassic Park as an authority?

z. I'm saying there's a distinction.

c. I agree.

z. did you make a high-brow, low-brow distinction between potential media texts?

c. like games as opposed to movies…

z. even beyond categories…I'm talking about particular books for example.

c. yeah. I think our selection was based on something that we could both talk about. So looking for a high-brow or looking for a lowbrow was really a factor, but it could have been, I mean I don't think I would have suggested a silly movie…

z. austin powers, for example?

c. yeah. You talk about ethics you're thinking of ethics as a particular movie. Austin Powers doesn't spring to mind when you consider ethics and movies. So yeah, automatically you're thinking of a high-brow sort of thing, because you think 'oh, ethics, that's a big issue', although I'm sure we could have just as easily have talked about ethics in austin powers, especially how women are portrayed in that movie.

z. did you make a distinction between ethical and textual analysis?

c. no.

z. so it was all the same for you?

c. yeah.

z. so when doing a textual analysis that's necessarily an ethical analysis?

c. yeah, I think it's difficult to not have an ethical viewpoint when doing a textual analysis.

z. can you give me an example?

c. well, it's impossible to escape bias. Any time you're doing textual analysis, your ethical position is always going to influence what you write.

z. what do you mean by ethics?

c. (pause) good question. I would look at ethics as interaction within society.

z. would you consider it to be the same thing as morality?

c. no

z. same thing as ideology?

c. no. although I think both those contribute to it.

z. would you consider it to be something formal?

c. I think it can be constituted formally, but I don't think it is necessarily formal.

z. do you think it is necessarily conscious?

c. I don't think it is necessarily conscious at all?

z. do you think any of those views have been informed at all by your experience on this experiment?

c. only in that it was difficult to criticise another person's position.

z. is that because of the environment?

c. no, in general.

z. did you ever have a sense of audience?

c. other than the participants, no, because I think you may have stated that this was inaccessible to outside, but you could have been lying!

c. so you had a sense of audience in terms of other participants and myself.

c. yes.

z. and what about the future readers of this research...did that ever cross your mind?

c. no.

z. did the sense of audience, however minimal, every influence what you wrote

c. of course.

z. did it ever influence how you wrote?

c. yes. Grammar and spelling mostly and constructing an argument that would be understood by other people.

z. how did it influence what you wrote?

c. content wise. Just in that I constructed an argument that was accessible to others.

z. how would you compare this environment with a mailing list, for ethical discussion?

c. well, there's a different audience. You would assume are a small, closed environment, only accessible to members, whereas viewreviews is potentially accessible to everybody who has access to the internet.

z. do you think mailing lists would be better?

c. if you just want to argue a specific position in a small group, then a mailing list is better, but if you're looking for a wider audience and wider participation, then I think your environment's much better.

z. how about compared face-to-face discussion?

c. the advantage of viewreviews is that it's on record and you can go back and review what you've said and what other people have said, whereas in face-to-face there is no record, there is nothing written down.

z. do you think face-to-face has an advantage because it's synchronous?

c. yeah, it's quick, but then again, because of the rapid-fire quickness of it, it doesn't lend time for reflection, whereas with viewreviews, I think left time to think about what had been written and to think about what you were going to write and to *alter* what you were going to write, before you posted it. In fact I think it required more, because it's written, because it's gonna be permanent…you thought more about what you were gonna write.

z. what about online chat?

c. it's more akin to face-to-face. If you're gonna open it up to everybody, my experience with online chat rooms is that nothing much would happen, as far as actual discussion, whereas a small group in a chat room, discussing a particular topic would have a better chance of beginner a debate.

z. can you pinpoint perhaps any critical factors that contributed to the progression or lack of progression in your partnership?

c. just the amount of time it took for each of us to get back to the other on what we had written and the fact that we didn't start as quickly as we felt we should have if we were gonna actually develop a dialogue.

z. do you think you've changed your partner's mind over anything?

c. I wouldn't think so, based upon what she had written back.

z. any suggestions for future improvements?

c. access to the reviews is still a bit difficult. It was difficult to find the review you were looking for. You either had to go through the categories, which you may not know of in advance, or you had to go through the reviewer's profile.

z. and going through the reviewer's profile…why was that difficult?

c. once you knew the reviews were connected to the reviewer's profile…that was the problem.

z. categories – were they useful, problematic?

c. a bit problematic. I wasn't sure where to stick forrest gump.

Christa Post-Task Interview

Conducted: 14/07/01

Others Present: None

z_maqsood: hi Christa,

Yahoo! Messenger: ChristaPopadou has logged back in.

z_maqsood: Christa, do you think your ethical perspectives were changed?

ChristaPopadou: not really

ChristaPopadou: just thought that some other people have different options concerning that and this is the best part

z_maqsood: did you learn more about other people's ethical perspectives?

ChristaPopadou: yes, definitely, that was my point

z_maqsood: what do you think you learnt?

ChristaPopadou: not masturbating the same thing in my mine

z_maqsood: eh?

ChristaPopadou: sometimes we think that we are right and if we see different opinions then we sopped doing that

ChristaPopadou: no what you thought☺

ChristaPopadou: stopped actually

z_maqsood: please explain the comment about masturbation?

ChristaPopadou: come on, when you have your own thoughts without considering other people' options then it is a masturbation, a mental one, dont you think so

z_maqsood: oh, i see, manual stimulation?

ChristaPopadou: ethical issues are really broad and it is a masturbation if you think that I am the right person who says that

z_maqsood: did you learn much about your partner's ethical perspective?

ChristaPopadou: stimulation for different aspects if you want

ChristaPopadou: yes, that is why it was stimulating

ChristaPopadou: mmmmmmm

z_maqsood: ☺

ChristaPopadou: he he

z_maqsood: okay, what did you learn about his ethical perspective?

ChristaPopadou: next Q?

z_maqsood: did you learn much about the technology, or about online discourse generally?

ChristaPopadou: wait, I cant remember right now, send me the url, it is impossible to have everything in mind, just thought that he was a very interesting guy

z_maqsood: ok. this is your page...http://www.viewreviews.com/view_profile.php?mem_id=9

ChristaPopadou: and I liked the photoes you put on as well

z_maqsood: this is his page...http://www.viewreviews.com/view_profile.php?mem_id=6

z_maqsood: Christa, did you learn much about online discussion?

ChristaPopadou: mm, I think I always do online discussion because of the ICT interest, I just thought that the way you constructed the webpage was a brilliant one

z_maqsood: why do yo think it was brilliant?

ChristaPopadou: because it was explicit and easy to work with, just press a button without loosing yourself in

z_maqsood: thank you for the compliment

ChristaPopadou: true

z_maqsood: did you find your partner interesting?

ChristaPopadou: yes, that is the problem, too contemporary I suppose

ChristaPopadou: I am not that good in it

z_maqsood: i don't understand?

ChristaPopadou: and variety of interest as well

ChristaPopadou: nowdays I dont read much other stuff except the academic ones since I havent got time to do it

ChristaPopadou: I feel a bit behind my age

z_maqsood: so did you find him interesting?

ChristaPopadou: not contemprary as looks> yes, why? is he available 😊

ChristaPopadou: I am too old for him though 😊

z_maqsood: how do you know?

ChristaPopadou: he is 26 isnt he

ChristaPopadou: Oh, hoew do I know about it?

ChristaPopadou: Ok, from the subject and the comments he did on them

z_maqsood: ahh! so you used the site also to check him out? 😊

ChristaPopadou: variety of interests and accurate on his comments

ChristaPopadou: yes I did! I am looking around if you want to know 😊

ChristaPopadou: he he he

ChristaPopadou: is it part of the interview as well?

z_maqsood: he, he. maybe i can put in a good word...?

ChristaPopadou: he he next Q?

z_maqsood: did you learn more about media texts and media analysis?

ChristaPopadou: I prefer this interview though

z_maqsood: why?

ChristaPopadou: yes, I didnt know that this kind of stuff existed in the first place

ChristaPopadou: because I am use to it

z_maqsood: what kind of stuff?

ChristaPopadou: I will start loosing my voice in a couple of years

z_maqsood: what kind of stuff?

ChristaPopadou: media texts and media analysis, I thought that only jerks used to do it, at least in Greece it is not an academic subject

ChristaPopadou: but here is different and I was surprised that IoE has this kind of subjects as well

z_maqsood: do you think it is different to ethical analysis, and how?

z_maqsood: do you think it is different to ethical analysis, and how?

z_maqsood: Christa?

z_maqsood: r u still there?

ChristaPopadou: sorry friends are coming, wait

ChristaPopadou: first of all I didnt know that there is an ethical analysis, everything is so new to me

ChristaPopadou: never heard of it actually and I think it is different, two different things but they sould meet in specific areas I suppose

ChristaPopadou: could

ChristaPopadou: hey, r u there?

z_maqsood: Christa, please use '...' if you are continuing your answer.

otherwise i will sit here waiting 😊

ChristaPopadou: OK

z_maqsood: next Q

z_maqsood: do you think your partner contributed enough?

ChristaPopadou: which one?

ChristaPopadou: Ok

ChristaPopadou: the problem is that my partner contributed, emailed me but I was a bit frustrated with the other stuff and could reply to his calls or yours, sorry about athat

ChristaPopadou: couldnt reply

z_maqsood: no problem...

ChristaPopadou: i nkow that there is a prob when u r doing a research thats why... 😕

z_maqsood: did he email you directly? or just leave a message on the message board?

ChristaPopadou: I think that he used both ways, I am sure but I think so, he definitely used the board a couple of times

z_maqsood: okay, next Q...

ChristaPopadou: waiting

z_maqsood: you did not write much about yourself in your profile (http://www.viewreviews.com/view_profile.php?mem_id=9) why was that?

ChristaPopadou: I hate myself in a way and I dont like talking about me, thats all

ChristaPopadou: in general, if you see all my profiles, real and virtual ones I dont write anything in it

ChristaPopadou: hobbies>none

z_maqsood: why do you hate yourself?

ChristaPopadou: interests>none

ChristaPopadou: something like that

ChristaPopadou: dont know, just dont want to think about it

ChristaPopadou: dont want to search for it if you like

z_maqsood: ok...

ChristaPopadou: no confidence I suppose

ChristaPopadou: nextQ?

z_maqsood: he did not write much either. would you have like to have seen more?

ChristaPopadou: if i had time definitely

z_maqsood: about the profile, i mean.

ChristaPopadou: Oh,

ChristaPopadou: yes

z_maqsood: next Q...

z_maqsood: you used an image for your review. why?

ChristaPopadou: i think 1 image is 1000

z_maqsood: did you find it difficult to use this image feature of the system?

ChristaPopadou: yes, a piece of cake

z_maqsood: what do you think of...

z_maqsood: his messages on the message board?

z_maqsood: http://www.viewreviews.com/view_review.php?rev_id=16 by the way

ChristaPopadou: wait

ChristaPopadou: yes, i remember it

ChristaPopadou: he didnt have any replies to have an interatcion

z_maqsood: do you think they were good messages?

ChristaPopadou: yes!

z_maqsood: why did you not post any messages to *his* reviews?

ChristaPopadou: but not that much to comment upon them I suppoe

ChristaPopadou: I didnt because even the thought was too frustrating for me

z_maqsood: why? time?

ChristaPopadou: just the thought was fristrating for me

z_maqsood: why was the though frustrating?

z_maqsood: sorry, thought.

ChristaPopadou: because I felt guilty of loosing time from my dis which is boolshit by the way, but is how I felt

z_maqsood: what is bullshit? you dissertation?

ChristaPopadou: no, this thought actually

ChristaPopadou: of loosing time

z_maqsood: oh. okay.

z_maqsood: next Q...

ChristaPopadou: ok

z_maqsood: what did you feel about the interface...

z_maqsood: structure, navigation, categories?

ChristaPopadou: I answerd the q I think

ChristaPopadou: but wait

ChristaPopadou: I think it was brilliantly designed

ChristaPopadou: all the stuff

z_maqsood: thank you 😊 😊 😊

z_maqsood: ok next Q...

ChristaPopadou: yes

z_maqsood: did i interfere too much, or not enough...

z_maqsood: in terms of my moderation?

ChristaPopadou: I think it was

ChristaPopadou: as we needed

ChristaPopadou: it

z_maqsood: ok next Q...

ChristaPopadou: yes

z_maqsood: what you wrote was 'published' and public, by being on the web...

z_maqsood: did this give you a sense of an audience?

ChristaPopadou: wait

ChristaPopadou: yes, in a way, and responsibility that comes with it

z_maqsood: what kind of responsibility?

ChristaPopadou: not to write crap

ChristaPopadou: you know

z_maqsood: ok, next Q...

z_maqsood: do you think a mailing list like eGroups...

z_maqsood: would have been better for ethical discussion?

ChristaPopadou: no, I think this is different

ChristaPopadou: it provides a different way to present our opinions

z_maqsood: how so?

ChristaPopadou: it is personal and public the same time

ChristaPopadou: and you can see the messages one by one without

searching for them

z_maqsood: sort of automatically threaded, you mean?

ChristaPopadou: it was really convinient

ChristaPopadou: yes

z_maqsood: do you think face-to-face would have been better for ethical discussion?

ChristaPopadou: I am not sure it might a bit "flaming" that way

z_maqsood: how so?

ChristaPopadou: I mean too many opinions the same time and all talking together, text provides thinking before you write you have to be circumspec on your opinions

ChristaPopadou: next Q

z_maqsood: sorry...

z_maqsood: i just had to answer the door.

z_maqsood: do you think chat, like Yahoo messenger would have been better for ethical discussion?

ChristaPopadou: I think it could be, but between people that already know each other otherwise they wouldnt say much

z_maqsood: yes, i agree...

z_maqsood: i think the issues of people feeling relaxed with each other is crucial.

z_maqsood: ok, next Q...

ChristaPopadou: yeah, i think so too

z_maqsood: do you think you made progress through the task?

ChristaPopadou: what do you mean?

z_maqsood: what do *you* mean by progress?

ChristaPopadou: progress is somehitng the\at requires development or so

ChristaPopadou: unless you think that knowing differenrt stuff than usual is a developmental process

z_maqsood: what do you think were...

ChristaPopadou: answerd before about that I think

z_maqsood: the critical factors that determined the degree of success of your online ethical discussion?

ChristaPopadou: Ok, let me think, because i didnt do much

ChristaPopadou: having a subject, a starting point

ChristaPopadou: an interesting partner

ChristaPopadou: interaction and dialogue, different aspects

z_maqsood: great.

ChristaPopadou: cant think of any right now...

z_maqsood: which do you think you had, or didn't have?

ChristaPopadou: didnt because I wasnt there much, my problem

z_maqsood: ok.

z_maqsood: next Q...

z_maqsood: Do you have any suggestions for future improvements?

ChristaPopadou: I think it was great, I dont think that I would be able to add sth

z_maqsood: *wow*!

z_maqsood: 🙂

ChristaPopadou: he he ehe🙂)

z_maqsood: well, i think that's all, Christa.

z_maqsood: i just want to thank you for effort.

ChristaPopadou: byeeeeeeee

z_maqsood: ciao!

Yahoo! Messenger: ChristaPopadou has logged out.

Appendix G – Example Online Interaction

1. Home Page
2. Farah-Richard Interaction

Figure 1 Home Page

Figure 2 Farah's Profile Page

Figure 3 Richard's Profile Page

Figure 4 Farah's Review

Figure 5 Richard's Review

Figure 6 Discussion of Text

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