An investigation of “agreement” in the context of interprofessional discussion online: A “netiquette” of interprofessional learning?

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Introduction

The recent international scan of interprofessional education (IPE) practices in the World Health Organization's report (WHO) confirms that 'although interprofessional education is normally delivered face-to-face, technology is emerging as another valuable option' (WHO, 2009, p. 16). This paper offers insight into a technology enhanced IPE initiative involving undergraduate students from 14 health and social care professions across two higher education institutions in the United Kingdom (UK). Online discussion forums provide the means of achieving group interaction and collaborative interprofessional learning (IPL). It is the text-based transcripts of this interaction that provide a window for a fine grained analysis of the extent to which interprofessional teaching ideals, such as gaining understanding of role definitions/boundaries, mutual respect and valuing one another's professional roles are achieved. Gaining insight into the intended and unintended outcomes of IPE initiatives, such as that described presently, is vital if potential pitfalls, such as inadvertently worsening students attitudes and perceptions of colleagues (Hammick *et al.*, 2007) or reinforcing negative stereotypes, are to be avoided (Hean, 2009).

Online collaboration and conformity

Jonassen (1996, p. 176-177) suggests that the online discussion forum constitutes 'a naturally collaborative technology. It fosters collaborative meaning making by providing multiple perspectives on any problem or idea.' As such, online forums provide an ideal vehicle for

interprofessional dialogue, the fostering of increased understanding, mutual respect and willingness to share ideas, in a relatively safe context.

Skeptics might argue that there is no substitute for face-to-face interaction, even though asynchronous discussion, which is a feature of the initiative discussed, has advantages such as allowing the text to be reviewed before posting messages, resulting in fewer miscues and greater time for reflection (Hull & Saxon, 2009). However, perhaps most importantly in the context of this IPE initiative, Wallace (1999) suggests that virtual groups tend to develop their own set of norms, which leads to a sense of conformity. In fact, Postmes *et al*. (2001), writing from a social identity perspective, suggest that intra and intergroup processes might be more powerful online as in this context social category cues are more influential than interpersonal information. Participants identify with and position themselves within the group, thus reducing in-group heterogeneity and enhancing perceptions of intra-group similarity, which has implications for conformity. Cinnirella and Green (2006) point to 'netiquette' as evidence of conformity online. 'Netiquette' is a term derived from 'networks' and 'etiquette' that is applied to conventions of politeness and courtesy, which promote positive online interaction (Scheuermann & Taylor, 1997). The idea that a special sort of netiquette which favours students' acquiescing to the comments and ideas of others as part of a perceived expectation that interprofessional interaction and collaboration arises through agreement with collaborators, might be in operation in an interprofessional forum serves as a point of departure for this paper. However, we argue that healthy disagreement has potential to lead to greater understanding through co-construction of knowledge and eventually the possibility of improved interprofessional working in practice.

Research on Agreement and Disagreement

A number of conversation analysis (CA) studies have dealt with how people manage agreements and disagreements in interaction. The most consistent CA finding about dis/agreement is that in interaction, agreement is preferred and disagreement is dispreferred (Pomerantz, 1984). Generally, agreement is more interactionally desirable than disagreement, which is marked by features such as hesitation, pausing, reformulations and false starts; all highlight the comparative difficulty in disagreeing. Leech (1983) proposed an 'agreement maxim' in which speakers attempt to minimize disagreement between themselves and others. Therefore, agreements tend to be made explicitly and quickly (in synchronous communication) when compared with disagreements. Kotthoff (1993, p.196) argues that 'preference structures are pre-shaped by institutional requirements ... and in turn help to create the institutional setting'. That is, speakers orient to the expected norms of their context; a finding which has particular relevance for this project where the 'institutional' requirement favours positive interprofessional relations, possibly sending subliminal messages to students that disagreement is not constructive.

Kuo (1994) identified repetition (directly repeating what has been said before) and 'upgraded agreement' (where an elaborated, stronger alignment with the position is made) as rhetorical strategies used to signal agreement. Mulkay (1986, p. 308) showed that in written text, agreeing may often require 'a formal restatement of what is agreed'. Mulkay (1985, 1986) showed that disagreements are more complex than agreements (see also Kuo, 1994; Leech, 1983; Pomerantz, 1984), but that disagreements are easier to make in written text (compared to face-to-face conversations), which suggests that disagreement is easier in online communication. Disagreements are likely to be prefaced with partial agreements (Baym, 1996; Mulkay, 1985; Pomerantz, 1984) and may be accompanied by an upgrade or downgrade (a stronger or weaker aligning with the previous point). Baym (1996) showed that disagreements are often followed by

tokens such as 'but' (see also Kuo, 1994) and qualifications such as 'I think'. Baym (1996, p. 338) concluded that 'disagreements were more likely to have reasoning, to be qualified, to apologize, to acknowledge the other's perspective, and to be framed as non-offensive'.

Baym's (1996) analysis of internet forum interactions showed that many agreements began with a reference to an earlier message (repetition) and involved the writer explicitly naming the author of the post with which s/he was agreeing, which was possibly done to 'enhance public recognition of the other' (Baym, 1996, p. 330). She also identified elaboration of a previous post as a common feature of agreement, which can be seen as a type of 'upgraded agreement' also identified by Kuo (1994).

Guiller and Durndell (2006) showed that in online learning discussions agreement occurred in 22% of cases, whereas disagreement occurred in only 9%. They also identified a gender difference, where females were much more likely to agree than males, who were more likely to disagree. Chen and Chiu (2008) suggested that online settings can increase disagreement, as here disagreements are less face-threatening and are more likely to bring about a response than agreement, which is less likely to be met with an explicit agreement token. They claim that posters attempting to disagree are likely to elaborate on their posts so as to prevent further disagreement. Others (Nathan, Eilam, and Kim, 2007; Wells and Arauz, 2006) argue that this increased disagreement can be beneficial to learning environments as it can facilitate further discussion.

Is healthy disagreement evident in practice?

Health and social care practice is underpinned by knowledge drawn from natural science, social science and the humanities. All, not least scientific knowledge are contingent, transitory,

unstable and open to interpretation providing opportunities for disagreement and debate that are deemed helpful in advancing thinking (Laudan, 1984). Agreement might be seen as a means of maintaining the status quo whereas disagreement can be construed as more healthy and likely to promote change; interestingly the converse is evident in the literature where professionals seem unable to disagree without it having negative repercussions. Studying interaction between qualified health and social care professionals, Young *et al.* (2005) found that where challenges or disagreements occur within a team they often relate to issues of role definition or valuing one another and/or each others professional group. Disagreement appears to expose a clash of professional values and leads to poor working relationships. Where teams fail to understand each others contributions they invest energy in disagreeing with each other, but not in a healthy way (Lingard *et al.* 2004; Young *et al.* 2005; Nordgren & Olsson, 2004; Salhani & Coulter, 2009).

Research Context

The online discussion groups explored in this study form part of an interprofessional e-learning pathway (IPeLP) developed by Coventry University in collaboration with Warwick Medical School (Bluteau & Jackson 2009). The IPeLP was launched in September 2005 and now involves students from 14 groups including: adult, mental health, learning disabilities and young people and children's nurses, paramedics, midwives, medics, physiotherapists, occupational therapists, dietitians, operating department practitioners, rehabilitation engineers and social work and social welfare students and youth work students. The logistics of providing IPE for approximately 2,800 students at several points throughout a range of professional courses necessitates an e-learning approach to provide access for students and their facilitators from any internet enabled location (Bluteau & Jackson, 2010).

The pathway enables students to work together online in small, relatively safe, independent closed groups, each with a trained e-facilitator. Each group sets it own ground rules, typically committing to observe confidentiality, respect one another and commit to sharing ideas. Scenarios unfold in weekly episodes over a four-week period, during which students work collaboratively on a series of e-activities. The data on which this research draws originate from the Year 1 and 2 IPeLP forums. Year 1 pathway is situated in an 'Inequalities in Social Care and Health' module. The students are given a scenario of a mother living in 'the Street' who is unable to obtain a repeat prescription without making an appointment with her GP, which proves difficult. Students are tasked with identifying what they would do or say as health professionals faced with her blaming recently arrived immigrant for the lack of appointments.

The Year 2 pathway focuses more specifically on professional roles, care provided and deficiencies in the system in the context of a patient journey.

Methodology

The data in this analysis is drawn from a corpus of data collected for an ongoing research project about interprofessional learning in the IPeLP. Ethical approval for the project was obtained from Coventry University Research Ethics Committee. Students were alerted to the project rationale and intended process prior to the commencement of discussions and had opportunity to opt out of having their online postings used for research purposes. Only one student chose to do so. A sample of 10 interprofessional discussion groups were randomly selected from a possible total of approximately 123 first and second year discussions. Postings were indexed and anonymized by replacing student names with a number and labeling by professional group.

The analysis used here is the discursive analytic tool, conversation analysis (CA) (Sacks *et al.*, 1974), which allowed us to conduct a 'fine grained' analysis of the interactions in the discussion forums. This discursive approach (e.g. Edwards & Potter, 1992) focuses on the action orientation of talk, which means that the interest is in what is accomplished in the interaction, such as how agreements or disagreements are brought about and managed, rather than focusing on what the comments tells us about the students' own thoughts or beliefs. Conversation analytic findings have been used to address agreement and disagreement in talk (Pomerantz, 1984) and in on-line communication (Baym, 1996) but not yet to explore interprofessional learning, which provides a novel focus for CA.

To conduct the analysis, the data were read thoroughly and independently by all authors who searched for instances of agreement and disagreement in the interaction. Data sessions were conducted in which the authors concentrated on the way in which these agreements and disagreements were constructed, and it was from this detailed analysis that the structure of, and preference for, agreement was identified. Cases of agreement and disagreement were not required to contain the structures identified in the literature (e.g. Pomerantz, 1984) to be considered for analysis. CA does not aim to quantify its findings, however the extracts embedded in the following discussion are those which best illustrate the structure that the analysis identified and are therefore representative of the overall findings. These findings can be generalized to the remainder of the discussion forums, not in terms of how many cases contained agreement or disagreement, but in terms of how these agreements and disagreements are brought about and structured (Goodman, 2008).

Findings

The online discussion forums each provided a wealth of digital text within which the research team became immersed. Consistent with the literature on online discussion in general (Baym, 1996; Guiller & Durndell, 2006; Kuo, 1994; Pomerantz, 1984) the analysis identified an overwhelming majority of posts, which contained agreement.

Agreement

The following illustrative posts show the nature of agreement evident in both Year 1 and 2 forums. Very often students began their postings by agreeing with a previous post, usually in the form of a general acknowledgement of agreement. For instance,

> *"There are some very interesting opinions here and I agree with them all…"* [Physio1]

However, agreement was frequently characterized by a standard three part structure: (1) The writer being agreed with is named (2) There is a token of explicit agreement (3) There is some element of elaboration of upgrading of the point being agreed with. For example,

> "*As* [medic 1] *has said these remarks are being made out of frustration, and probably some ignorance, it is easier to blame others than examine your own lifestyle."* [Physio1]

In some cases explicit agreement included more than one person and was supported by a positive reinforcement:

> "[Physio1) *and* [Medic 1] *have made very good points here. I agree with their view that these concerns are expressed partly out of frustration. It is sometimes easier to find reasons not to do things than to make the effort to do them"*. [Medic 3]

Year 2 students' posts showed similar agreement strategies but the strength of agreement was often more forceful as well as explicit. For example, *"I completely agree", "I strongly agree", "I totally agree". "I think what you said is important"*. Such emphasis is possibly attributable to greater self-confidence through development of personal knowledge and experience or indicative of interprofessional 'netiquette' that favours acquiescing to the comments and ideas of others.

Other posts indicated implicit agreement and used repetition to upgrade agreement before expanding discussion. For example,

> *"Yes* [Adult nurse 4], *you seemed to have given us a very thorough picture of the nurse's role in caring for Jenny. I was just going to say that nurses spend far more time with the patient than the rest of us do and so they would be the first port of call if the patient has any issues. The nurse can then inform members of the MDT on handover or can speak to the medics directly if it is more immediate*". [Physio 3]

Occasionally, agreement is followed by additional information, which is offered tentatively, leaving no room for it to be construed as criticism or a challenge:

> *"Hi* [Adult nurse 1] *I agree with all the aspects of care you would provide for Jenny. As an Adult Nurse, I can't think of much more to add apart from checking the condition of the wound on a daily basis"*. [Adult nurse 2]

Disagreement

Disagreement was far less common with very few posts showing any suggestion of this at all. In these 'deviant' cases any disagreement was brought about with a great deal of delicacy as has been identified previously (Baym, 1996; Mulkay, 1985, 1986), suggesting that this was a

'dispreferred response' (Pomerantz, 1984). Typically, disagreement was more complex (Chen & Chiu, 2008; Mulkay, 1985, 1986); it was tentative, characterized by use of qualifying words, such as 'may' and was backed up with reasons/observations to support the comments. For example:

> *"I think that it may not be through drunkenness that she says these comments because in the scenario she has not drank the can yet and may not have had one all day. However, I do think she did say it because, as people stated early, she is uneducated and frustrated with the system"*. [Midwife 1]

In disagreeing implicitly and not referring to the author of the original post by name s/he attempts to avert potential repercussion from the disagreement. In addition, the student reinforces the message by alluding to early comments made by other students, therefore inferring some level of consensus of explanation for Amanda's behaviour.

Another student develops the analysis by weighing the different opinions and then offers a compromise, demonstrating how knowledge building occurs:

> *"I don't think that Amanda is necessarily drunk. She did have a beer but she may take alcohol in small doses to calm her nerves. She seems to be drinking quite early in the day and this could possibly point to alcoholism but if not it's still difficult to say whether there is a problem or not"*. [Medic 6]

While this student's rationale for disagreement was based on information within the text, the student in the following post draws on personal experience, making it difficult for others to challenge:

"It's interesting that you have highlighted her soberness (or lack of) as being a reason for her views - in my experience people are less inhibited when under the influence of alcohol and tend to be much more forthcoming with their true views and feelings as a result. However, being drunk in itself does not change your views or sentiments; it merely gives them more opportunity to be expressed and shared with other people (or less opportunity to be masked, depending on how you view it). So I have to respectfully disagree with". [Medic 4]

This student uses language carefully; s/he "respectfully disagrees" (Baym, 1996) and explicit confrontation is avoided by use of the word "you" rather than mentioning a name, which has been shown to be a feature of agreement (Baym, 1996), rather than simply reflecting a level of comfortable familiarity that students adopt online. The delicacy of this disagreement strongly suggests that the author is working towards the expectation that as a team they should agree (e.g. Pomerantz, 1984). The same student goes on to draw on personal expertise to support the point being made, then diffuses the strength of opinion by referring to an imperative for a collective "we" and concludes with a qualification by referring to "my feeling" (Kuo, 1994):

"I think we must all accept that a language barrier in any setting will increase the time taken to deal with a situation, so in essence a language barrier will lead to more time being spent with an individual at the GP/Social Services (if you disagree with me feel free to discuss, but as a former interpreter I can attest to this), although in fairness maybe not twice as much time. If she had specifically said "bloody foreigners" instead of "bloody spongers" my interpretation would be different - it's a minor, albeit valid, detail in my opinion. That's just my feeling". [Medic 4]

A dialogue between two Year 2 students illustrates how interprofessional debate can lead to new knowledge construction as acknowledging their lack of understanding they ask tentative questions of one another:

"The final two big points from this last installment that would heavily involve medics would be the continuing struggle to control her glucose levels and the arrangement of her imminent transfusion (which I have to admit I don't understand the role of!)". [Medic 5]

"Hi [Medic 5] *I thought that too but is it not because she is tired, possibly due to a fairly large loss of blood during surgery?"* [Adult Nurse 5]

"Hi [Adult nurse 5] *that makes sense, but why would she need a transfusion for that... couldn't they "top her up" by giving her a couple of units of blood instead of the ordeal of transfusion? Maybe I'm missing something"*. [Medic 5]

Same Medic – 5 minutes later:

"Oh ok, think I may have realised my mistake. I thought they were referring to blood transfusion as in fully replacing her own blood with donor blood, but now I understand they mean the addition of donor blood on top of her own. This now makes sense to what [name of adult nurse] said about replacing blood loss during surgery!"

Discussion

The aim of this study is not to quantify the number of dis/agreements to validate claims about the dynamics of interprofessional discussion online. Rather it highlights general patterns of interaction and attempts to provide increased insight into the ways in which online interprofessional discourse develops. As such we share our developing ideas illustrated by minute samples of data that highlight the specifics of interaction and show that students tend to agree with one another's comments online rather than provoking disagreement, which is relatively rare. These findings accord with that of previous research (Guiller & Durndell, 2006) and while the groups in this study were not analyzed specifically by age, gender or professional group, the sense that females are more likely to agree than males is broadly supported by this research.

The final brief student dialogue illustrates the benefit of the online forum in providing a safe setting in which to address misunderstandings and build confidence in sharing ideas. The majority of these students will never meet one another face to face, yet they are gaining valuable insight into role definitions/boundaries, values and beliefs and collaborative knowledge construction, deemed important in developing a 'collaborative practice-ready health workforce' (WHO, 2009: 13).

All of the excerpts above illustrate the careful construction of interprofessional dialogue raising a series of questions that we continue to explore. The comments appear to have been made with a sense of attention that can possibly be attributed to the asynchronous nature of discussion that allows greater time for reflection and prevents miscues (Hull & Saxon, 2009). However, the dialogue may reflect concerns to avoid disrupting group norms, developed at least in part through the construction of group ground rules, which favour a sense of conformity online (Wallace, 1999). On another level the discussion might illustrate the students' orientation to the

expected norms of their context; in other words the 'institutional requirements' (Kotthoff, 1993, p. 196) with which they perceive they need to identify professionally. This includes the ethos of the IPeLP and more broadly that of health and social care, both of which are underpinned by the principle of collaborative working.

The propensity to favour agreement and in effect to conform to popular opinion could prove problematic for students in the long term, especially if this finding is mirrored in the workplace and influences interprofessional team working. If disagreement is easier in online communication (Chen & Chiu, 2008; Mulkay 1985, 1986) and even here, in the IPeLP context, it is scarce, face to face disagreement in practice is likely to be even rarer. Where disagreement does occur in practice it appears to be destructive rather than constructive (Lingard *et al.* 2004; Young *et al.* 2005; Nordgren & Olsson, 2004; Salhani & Coulter, 2009). This could possibly be remedied if student health and social care professionals developed the capabilities to share divergent opinions and work through the inevitability of opposing views as part of their training as they do during the IPeLP.

Messages about collaboration and conformity appear to have a powerful effect on student interaction online. Learning activities are aligned to IPeLP learning outcomes of valuing one another's professional roles and boundaries and fostering mutual respect through discussion. Typically they are characterized by phrases such as *'post a considered response'* and use words such as *'colleagues'* to refer to other professional groups. Students are encouraged to share their diverse perspectives with instructions such as *"could he have done anything differently?"* However, despite in one case the facilitator praising the student for contesting an expressed view when s/he states, *"challenging points made graciously is an invaluable skill to possess"* very little dissonance is evident.

These findings highlight the importance of translating intended learning outcomes into e-activities that requires care (Freiermuth, 2002) if they are to promote desired learning and which is an aspect of the pathway that deserves greater scrutiny. If disagreement is beneficial for learning in that it generates further discussion (Nathan, Eilam & Kim, 2007; Wells & Arauz, 2006), attention needs to turn to findings ways of provoking it. However, given that our findings reflect those of general online dialogue, the perceived pressure to come to some level of agreement may override even more explicit e-activities designed to provoke disagreement and challenge. Lack of space precludes discussion of ongoing analysis, on a task by task basis, of the 'art' of writing learning activities to enrich depth of dialogue as well as provoking critical debate, although we expect to be able to report findings imminently.

Our next task is to consider agreement and disagreement more closely in relation to an interpretive model, developed using a grounded theory approach, by Gunerwardena *et al*. (1997) to facilitate analysis of online discussions. The model, which has been used in other research contexts, was developed by analyzing online debate through computer conferencing, which the authors believe provides a good example of a constructivist learning environment where collaborative construction of knowledge occurs. Its applicability to the IPeLP context is its focus on the ways in which active construction of knowledge moves through five phases, incorporating agreements and disagreements, eventually leading to the co-construction of knowledge, which could provide a framework to consider whether the nature of agreements and disagreements change as students progress through the three years of the pathway.

Conclusion

General Patton is known to have said "[i]f everyone is thinking the same then someone isn't thinking", which seems to point to the importance of healthy debate and to the need to socialise students into being able to disagree with one another, on the basis that all knowledge is contingent. If, as we have found, students in online interprofessional groups do not readily feel able to disagree with one another and debate their different stances to reach a level of understanding that promotes mutual respect and collaboration, we are missing the opportunity to help them develop the skills that will prepare them for practice. We have identified an aspect of the 'netiquette' of online IPL, which while typifying the conventions of politeness and courtesy appears a little too conformist. We identify several possible influential factors: concern to avoid disrupting group norms, orientation to institutional requirements, identification with the presumed ethos of health and social care and the impact of learning activities. When students do disagree, we see that they show increasing skill in approaching this delicately, exploring dissonance and beginning to negotiate meaning that we hope is transferrable to face-to-face encounters in real world settings.

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