

Understanding the experience of non contributory online participants (readers) in National College for School Leadership online communities

Abstract

This study explored the range of participation taking place in the National College for School Leadership (NCSL) online communities and focussed on participants who defined themselves as not actively contributing to the online discussion. We called these non-contributory participants "readers" Whilst we recognised that an individual community member's degree of participation might simply reflect their choice, we wanted to ensure that where fuller active participation was sought, there were no system or personal barriers to prevent it. A literature review with a dual focus was therefore made, the first element being factors in the online environment that might affect participation, and the second being personal motivation where we drew especially on dynamic motivation theory. A questionnaire was constructed based on this dual review. This had questions that generated both numerical and text based responses. After a pilot study, alterations in the questionnaire were made and the revised version was sent to 2,600 recently active community members. Over 750 replies were received yielding qualitative and quantitative data. Of these, 587 identified themselves as "readers" and only their responses were analysed for this paper. Analysis produced a very rich picture of motivational factors affecting participation in online communities. Benefits of various types of online interaction were put forward and suggestions about barriers to online interaction were made. This paper suggests that online participation may be seen as a continuum and that non contributory online participants (readers) are a far from homogeneous group ranging from those who experience technical and personal barriers to those who value and gain much from readership. Suggestions are made to assist readers who would like to take further scaffolded steps towards the role of contributor

Background

This study investigated the range of participation and potential barriers to interaction in the National College for School Leadership (NCSL)'s online communities which use the talk2learn (t2l) online environment. The study focussed on participants who defined themselves as not actively contributing to the online discussion. Literature provides a variety of terms to describe such non-contributory online participants (Lurkers, Legitimate Peripheral Participants and Readers). In this paper the term "reader" will be used as the first seems pejorative, and the second implies that this non-contributory status is a preliminary status which is intended to lead to 'fuller' participation at some later date – something that we wish to investigate rather than assume. **The core aim of this research was to investigate these "readers" and in particular:**

1. to understand the barriers that "readers" feel prevent their fuller participation
2. to understand the "reader" experience,

in order

3. to ensure that participation as a "reader" was a matter of choice

A social constructivist view of learning (Vygotsky, 1978) emphasises that learning begins in the social domain, through social relationships, through the support of experts (including more expert peers) and through discussion; only then is it internalised as higher cognitive functioning. In the activity theory of Leontiev (1978), learning is constructed through motive-directed activity in which subjects engage. Such activity leads to the construction of tools, and is supported by the use of tools, amongst which is the tool of language. In both of these views of learning, human beings are seen as essentially social – they act with (and learn with) others: their action and their learning is shaped by discussion with others. In addition, the world with which they interact is essentially social. It is shaped by socially determined cultural norms, and consists of groups and communities of people, and of the artefacts that these groups and communities create (Kaptelinin & Nardi 2006).

Social interaction can therefore be seen as an essential component of learning. In seeking to promote learning online it is therefore likely that one will wish to consider how best to provide electronically mediated versions of social situations in which action and interaction can take place. Online discussion groups are therefore likely to be relevant to any online learning situation. Such groups can replicate many features of face to face discussion: they can be structured as brainstorming sessions, formal debates with prepared contrasting positions and subsequent argument, Socratic dialogues structured around increasingly searching questions from a teacher, role plays, or hot seats where an expert states their own position and then fields questions and facilitates debate amongst contributors (UNISA, 2009).

Despite this flexibility, it may be considered that online discussion groups are merely electronic substitutes for face to face discussion, that they are useful, for example, for a community of learners that happens to be geographically disparate – but that electronic discussion is in some sense a second best. However, one could also point to features of online discussion that cannot be replicated in face to face situations. For example, online discussion can be asynchronous giving participants (students and teachers!) time to craft a response and to refer to authoritative sources as they do so; it can be less influenced by the status of participants, as the online environment may mask issues of age, gender, seniority, 'gravitas' that can be very evident in a face to face discussion, and that can distort that discussion with the ideas from some participants being given greater weight (at least by some participants) than those of others. Such factors can benefit any discussion, promoting depth in the thinking and encouraging inclusivity, and can be particularly relevant when participants come from different cultures, perhaps with English as a second language. As a consequence many higher education institutions routinely use online discussion as a course component for students who are present on campus and who also meet face to face.

NCSL uses the talk2learn online community environment as part of its blended learning offer to School Leaders. Blended learning combines the best features of online learning such as 24x7 accessibility, with the best features of classroom instruction such as live, face-to-face interaction. It allows the combination of multiple approaches to learning; self-paced, collaborative or inquiry-based study, and can be accomplished through the use of blended virtual and physical resources. The National Standards for Headteachers emphasise the need to make use of emerging technologies for teaching and learning, to know about the strengths, capabilities and objectives of other schools and to build and maintain effective relationships with parents, carers, partners and the community to enhance the education of all pupils. By working together online, formally and informally, in subject-specific areas and by taking part in hotseat discussions with policy-makers, key thinkers and government ministers, school leaders can add an extra dimension to their professional development. Participants in online dialogues will contribute to the co-constructing of group knowledge and derive a sense of development from what they and others gain. This might be seen as an individual journey up the steps of Salmon's model (Salmon 2004) where participation as a "reader" might be an early stage. It might also be seen as less structured community interaction where all types of contribution are valued for group learning - at any point - as in the Seddon-Postlethwaite model (2007) where participants may read or contribute interchangeably. This study therefore came about as it was felt to be important that participation as a "reader" should be a choice, rather than the result of barriers which might be removed.

Literature review

Charles Arthur states that *"It's an emerging rule of thumb that suggests that if you get a group of 100 people online then one will create content, 10 will "interact" with it (commenting or offering improvements) and the other 89 will just view it."* (Arthur 2006). His Guardian article then indicates that these figures may be supported by recent data that in Youtube, each day there are 100 million downloads and 65,000 uploads. In Wikipedia: 50% of all Wikipedia article edits are done by 0.7% of users, and more than 70% of all articles have been written by just

1.8% of all users. "A site that demands too much interaction and content generation from users will see nine out of 10 people just pass by."

Current peer reviewed literature suggests that much online dialogue involves complex interaction between participants, mediated by technology. "Readers" reportedly make up the majority of members in online groups (Katz, 1998. Mason 1999; and Nonnecke 2000). In our own work with NCSL communities the ratio of readers to contributors was typically 30:1.

From the social constructivist position discussed above, one could argue that readers inevitably limit *their own learning* by choosing not to formulate, test and reshape their own ideas in debate with others. This is consistent with Schober and Clark (1989) who argue that effective learning from discourse comes only through direct participation. They identify that presenters accommodate the learning process of their active audience in a process called grounding. This allows negotiation of common ground to further understanding. Passive 'overhearers' (readers) are at a disadvantage without this collaborative learning. Such studies make the proportions of readers to contributors an issue to be addressed.

Other writers consider that participants who simply read contributions fail to contribute to the *common good*. In health, education and e-commerce the community is seen as the glue that holds people together so that they can collectively solve each other's problems (Preece, 2000). Simply reading is not supportive of that community. However, Kollock and Smith (1996), Wellman and Guila (1999) and Morris, Merrill and Ogan, (1996) take a different view: for them participation is not essential, but nevertheless they talk about a "critical mass" of contributors needed to support readers. They believe that even in many active, successful communities a small core of participants generates most of the responses. Some people respond only occasionally, and many read and never contribute.

Whichever of these positions one adopts, it is clear that participants make choices about the nature of their involvement in an online discussion forum (to contribute, edit or simply read material on that forum), or they have such choices imposed upon them because of some constraint in the way the forum is 'presented' to them. Our research explored this issue. It questioned why a range of different types of interaction can be found in online groups, is this a matter of choice? Or is it due to barriers that affect some participants but not others? This is not a simple distinction between free choice and unavoidable external constraints. There will be interactions between the external (probably technical) constraints and intra-personal (probably motivational) characteristics. For example, some participants might find a technical problem an impenetrable barrier to posting their own ideas on a discussion forum, others may have the confidence to seek technical support to overcome the problem. If some participants are restricted by difficulties (external or internal, technical or motivational) then these should be understood and, where possible, addressed. The research question was therefore 'How might participant experience be improved in talk2learn online communities?' By understanding readers and the nature of the barriers that they face, we sought to improve their online experience.

Existing literature supports the view that there may be many reasons why people do not contribute as Nonnecke & Preece, 2003 state that the main reasons why participants choose not to 'post' included: technical setbacks, a belief that there is no requirement to contribute, a wish to find out more about the group before participating, feeling uncomfortable in the group and thinking that their post would be unhelpful. The researchers suggest that contribution could be encouraged by better software and facilitation. However, Mason (1999) found one overriding reason given for reluctance to post comments was a feeling of incompetence. Katz (1998) surveyed readers and found that their reasons for a reluctance to contribute comments included being uncomfortable with the tone of public forums citing lack of shared values and lack of confidence in their skills and knowledge. The respondents in this study also described a need to become familiar with the terminology and practice used in the public forums and a preference

for anonymity until these had been assimilated. Whittaker et al. (1998) suggest that reading is a legitimate form of participation, (possibly a form of Legitimate Peripheral Participation (LPP) as suggested by Lave and Wenger 1990) an important transition mechanism for novices to learn about a new topics or social situations. The need to share identities with fellow participants before contributing has been described by several theorists. Wenger (1998) identifies this as a key step in community formation. Beaudouin and Vekovska (1999) describe the building of identity bonding and the taking on of roles and status within an online group Parks and Floyd (1996) found that when friendships developed, they involved contact outside of the online forum and such contact helped the transition to full participation.

Erickson (1999) suggested that the permanence of text based forums gives them the potential to be searched, reread and reflected upon. However preserved text may also provide a record of possible errors and comments that might be regretted, this can be inhibiting to those hesitating before posting. The amount of participant time available for participating in online groups will vary. Walther, Burgoon, and Park, 1994 found that if there is a wealth of material to absorb before contributions are possible then time availability becomes a limiting factor to contributing.

Group characteristics can be important, Nonnecke (2000) found that there may be more pressure in smaller lists for members to post since there will be little exchange and learning unless most people are posting. Larger groups were perceived to offer more freedom to read or post as participants wished. Similarly very focussed groups tend to encourage contributions though lack of time for those nearing the end of a relationship with a group can reduce or eliminate the desire to post or even to read messages. Along with group characteristics, member's characteristics may play a role in participant behaviours for example, extroverts may be more willing to post than people who are shy. Newhagen and Rafaeli (1996), believe that gratification is a strong motivation for online participation and that the sources of gratification may be different for those who read from those who post.

Technological issues can also arise and the need to become familiar with the software can delay posting for some participants. Frequently cited issues include navigation around a site including ways of finding and returning to follow conversations. Knowledge management techniques such as weaving and summarising can help as can high quality facilitation and online mentoring. These can help newcomers to feel at home with the group and its members.

In addition to being a *decision not* to engage actively in posting, reading may be a *decision to* satisfy needs which can be met perfectly well in this way alone. Some needs cited as being satisfied by reading were enjoying conversations or stories, being entertained, gaining information and access to expertise, and connecting with others, being part of a community. Choosing to read rather than post was therefore a complex, idiosyncratic process influenced by the individual's goals, experience, and the specific group in which they were involved.

The summary of the literature on barriers cited above, provided in Table 1, shows that the literature provides no single answer about why participants read rather than posting. Non-posting should therefore be viewed as a complex set of actions, rationales and contexts, i.e., situated action (Suchman 1987). The variety of findings could be a reflection of the fact that the different terms used in different studies (readers, legitimate peripheral participants, lurkers) could be referring to different types of non-active participant. This should also be borne in mind in considering the relationship between our own findings and those reported above.

Table 1. The categories of reasons that these researchers have suggested for reading rather than contributing in online communities

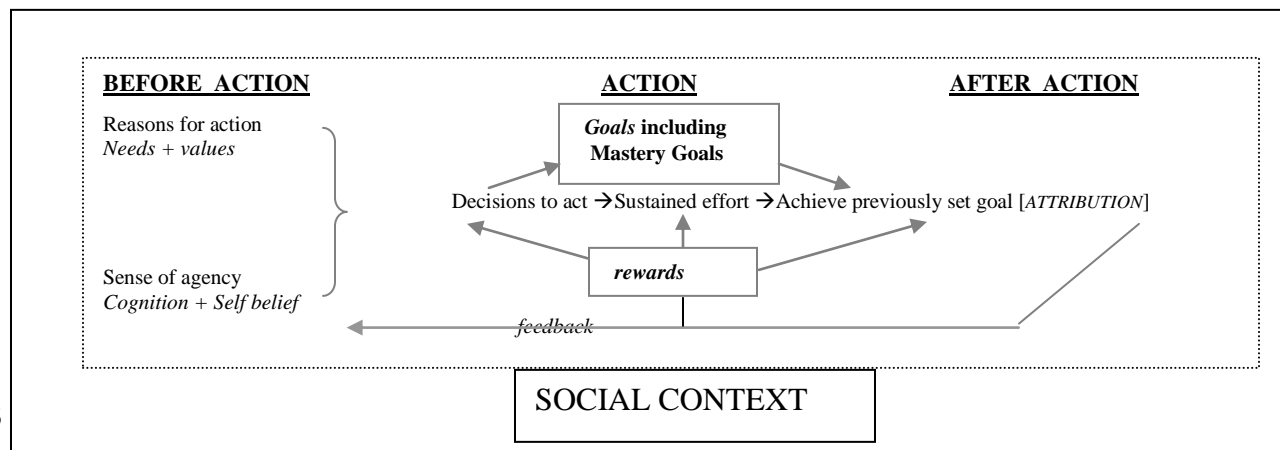
1. Member's character	
• Personal	Privacy, safety, shyness, language issues
• Relationship to group	Feel an outsider, feeling that they lacked expertise compared to other members
• Intention from outset	No intention from the outset, no need, driver or motivation, having a wish to remain uncommitted
2. Group characteristics	low (or high) volume of messages, poor quality of messages, no requirement, poor moderation, fluctuating activity, unwelcome response (or lack of response) to first post, delay in response.
3. Stage of membership	Reading most common when they are getting to know the group and when they are leaving the group
4. External constraints	Work related conditions unfavourable and lack of time

Alongside the literature reviewed above that deals specifically with categories of reasons for participants to remain as readers, a model of dynamic motivation, that we had developed earlier (Seddon, Postlethwaite, Skinner, 2008), was used as part of the theoretical framework for this study. The model is shown in the diagram below and in the context of this research it would suggest that for a reader to become a contributor they would need *reasons for action* and a *sense of agency*.

Reasons for action are based on needs and values and literature suggests that the following are important drivers: Autonomy, Challenge, Interaction, Usefulness, Appreciation, Making a difference to students. These drivers may be in conflict – for instance a wish to interact may clash with a desire to be autonomous. *Sense of agency* arises from feelings of self efficacy, self worth and self determination. For a full review of literature related to “Reasons for Action” and “Sense of Agency” please refer to Seddon, Postlethwaite and Skinner (2008)

The type of goal set can influence process of participation. ‘do your best’ or mastery goals giving a participant more freedom of choice than performance based goals. Rewards will come into play throughout the period of online interaction. In the model rewards can affect decisions to act (for a reader deciding to contribute the reward might be meeting course assessment requirements). Rewards can also lead to sustained effort (for a reader who then contributes, perhaps a reward might be some favourable feedback to a posting). Each of these might affect Self Belief and hence agency (perhaps through feelings of self-worth and efficacy) Failure to received a reward that is expected can negatively affect agency (lack of approval for a posting may for instance lead to feelings of self doubt) Thus rewards may affect agency - thus encouraging or discouraging participation and they need to be considered when structuring to online interaction.

Fig. 1 A model of dynamic motivation (Seddon, Postlethwaite and Skinner, 2008)



Such careful structuring and facilitation of interaction in the online community provides the social context for action in order to promote participation as a contributor rather than a reader. The barriers identified in table 1. form part of that context. There is a vast field of literature about online social networks that is beyond the scope of this paper though it may be worth noting that readers might equate to 'isolates' or 'partial network members' (Marin & Wellman 2010) who do not partake fully in the exchange of social capital but have access to resources.

To investigate decision-making about levels of participation we designed a questionnaire that would be given to participants in NCSL programmes. The structure of the questionnaire reflects both the characteristics identified by researchers in Table 1 and the motivational elements set out in the model in Fig 1. This will be considered further in the methodology section.

Methodology

This research therefore sought an understanding the experience of non contributory online participants (readers) in NCSL communities as a first step. Given the scale of the NCSL online learning enterprise the opportunity existed to gain insights from a large number of online community members. Although the study was essentially a case study of these NCSL communities, we therefore chose to adopt a survey design within that case, rather than a design that relied on in-depth data collection with a small number of participants. The literature quoted above offers suggestions about barriers faced by readers that were used to inform part of our survey construction. In addition we used the motivation theory that we have summarised to structure the remaining questions. Motivation theory also provided insights helping us to understand the responses given.

The two page survey (Appendix 1) consisted of 5 sections, the first simply requiring respondents' names. The second or introductory section asked them about their online experience and asked them to classify themselves along a four point scale from *reading* to *contributing*. Section three consisted of *needs statements* drawn from the literature review that drew on key *reasons for action* and elements of a *sense of agency*; they were asked to agree or disagree with the statements (again using a four point scale) The fourth section drew on literature about barriers experienced by readers and made statements about barriers to online interaction which they were again asked to agree or disagree with. The final section made suggestions about help that might be provided to readers who wished to contribute in online discussions and again, agreement or disagreement on a four point scale was requested. Each section had compulsory text boxes for further comments by respondents. The survey therefore collected both qualitative and quantitative data.

Considering the ethics of survey process, it should be noted that talk2learn is an authenticated community of school leaders where online discussion inputs are accompanied by contributor names and often photos. For authentication, contact details are required; participants are fully aware of this but can opt out of further communication from NCSL if they wish, thus restricting the use of their contact details to this original authentication purpose. Those who choose not to opt out are aware that further communication from NCSL can include surveys of the kind we had designed. Lists of participants are collected automatically in every talk2learn forum and are available to all community members. As stated, those who were approached were those on these lists who had not opted out of this type of communication. Respondents were assured that names would not be used in the analysis or be reported since the focus of the paper was on group rather than individual data. To ensure confidentiality secure storage on NCSL servers was maintained.

From the participant list, we eliminated those who were easily identified as frequent contributors leaving a group of infrequent contributors and 'readers'. A pilot study was carried

out with a sub-sample of fifty of this group inviting their comments on the questionnaire. To do this an email was sent to these 50 participants containing an active link to the instrument. This was to avoid placing additional requirements on possibly less confident IT users, who would otherwise have to log in.

Analysis of returned pilot surveys led to refinement of survey questions which removed possible ambiguity. An email with a link to the revised survey was sent to 2957 members of 'talk to learn', on the day prior to the survey form opening on 10 May 2006. Respondents who followed the link completed the questionnaire on line. A reminder email, with the link to the survey was sent those who had not completed their surveys on 2 June 2006. Possibly as a result of this reminder email a large number of surveys were completed in the final week; approx 40% of the total.

The survey automatically closed at midnight on 8 June 2006. 753 forms were completed and returned. The completed surveys were downloaded onto Excel for data extraction and analysis.

The return of 25.5% is high for such a large survey. One of the first questions on the survey (in section two) asked respondents to describe the nature of their most common type of participation. 587 of the respondents (i.e. 79%) identified themselves as predominantly *readers*. It is likely that anyone using an online discussion forum will read more than they contribute, but 21% still regarded their common participation as contributing (despite the fact that the most easily identified contributors were omitted from the sample altogether). This may reflect their sense of what mattered to them as they participated – they may have been reading in order to contribute but this contribution was still their focus. By contrast the group who self identified as 'readers' may have seen reading as the main focus of their work online. One purpose of the analysis reported here is to understand the nature of this group of *readers* so we return to this issue when we report the findings of the study.

The survey itself was voluntary and completion was taken as informed consent, our overall intention was to improve the online experience of participants and this was made clear. To do this we focussed on those who were not frequent contributors in the belief that those who contributed frequently were happier with their experience. The espoused purpose of the survey was addressed: insights from the respondent readers led to development of a toolkit that included model of forms of participation (Seddon and Postlethwaite, 2007) and a mentor course to train mentors to help new participants get started on line was re-introduced.

Results

The result from the survey will be presented in the three sections shown in Fig 2. An example of the process used in Level Two analysis is provided in Appendix 2 to the paper.

Fig 2. Stages of Analysis

STAGES OF ANALYSIS	
Level one analysis	Report of initial survey results from readers only.
Level two analysis	Relationship between responses to survey questions. Text summary in this section – an example of detailed results in Appendix 2.
Text analysis	Summary of additional information from text based responses

Level one analysis – percentage responses to quantitative questions from readers

From Section two of the survey (750 responses) a total of 587 (79%) of those who responded considered that they were readers. This is lower than that suggested by literature (90;1) and suggests that some of the issues affecting more active participation had, perhaps, been addressed in the NCSL context and that the remaining issues that are reported below were the more difficult ones to resolve

It might be argued that almost everyone would feel that their main engagement was as a reader even if they also contributed. It is therefore interesting that 21% self reported that they did more than just read while 20 (3%) considered that they were active contributors – quite a high figure given that the easily identified contributors in the community had been omitted from the survey altogether.

The rest of the analysis in this paper used the 587 reader responses. Results from reader response to each section of the survey will now be presented, section by section in bulleted format. Section one asked for names and section two asked for background details including their self classification as reader or contributor and if they believed that it was easy to gain information through dialogues (58% agreed). Answers from section three four and five now follow. The bullets are in question order from the survey which can be seen in Appendix 1.

Survey Section Three: SUGGESTIONS ABOUT BENEFITS OF ONLINE INTERACTION

- The sense of **belonging** was important, with 62% of readers agreeing it was good to be part of an online group.
- The need to feel **valued** was also recognised by almost half of the readers
- Over half (55%) of readers felt that they might have something useful to say
- More than two thirds believed that **information** gained from t2I would be of use in participants' schools
- Almost half of readers disagreed with the statement that they enjoyed the challenge of participating online.
- Over half of readers (52%) said they felt that online discussions helped make sense of participants' problems
- Exactly 50% felt that t2I gave them opportunities for development
- Two thirds of readers agreed that all types of contributions are valuable and giving information helps others analyse and move forward.
- Time was an important factor with over three quarters (76%) agreeing that they liked the autonomy to be able to choose when to participate
- Having **time** to reflect before responding was important for 72% of readers.
- The diversity of the contributors to t2I was valued by 68% of readers.

Readers clearly felt that they gained information and understanding from their (limited) form of participation which may be consistent with the idea that reading was the focus for their participation (see above). They also reported that they gained motivational benefits (such as 'a sense of belonging', and of being valued) that might be functioning for them as rewards. They exploited some of the claimed benefits of online discussion – the affordance it provides for participants to think before responding, and the autonomy it gives participants to control the times when they participated. The value given to the diversity of contributions is also an interesting benefit of online forums where the levelling of status might be expected to generate a wider range of input than in face to face situations, where variety might be reduced by participants wishes to achieve synergy with the position of the more obviously powerful participants.

Survey Section Four: SUGGESTIONS ABOUT BARRIERS TO ONLINE INTERACTION

- Over half the readers (54%) believed that there was no need to respond to contributions. It was enough to read and reflect on them.
- The wish to remain anonymous was important to half of readers who did not want their name to be on their contributions. (This was not current practice in NCSL t2I communities.) Interestingly the need for anonymity was contradicted later where 69% did not want to see more anonymous discussion.
- Although 50% of readers wanted their contributions to be anonymous, only 39% felt inhibited about posting contributions.
- Two thirds of readers (65%) felt that they had nothing to add to discussions as others had already responded in the way they would have.
- In terms of amount to read only 36% felt there was too much to read before contributing
- Only 18% of readers felt that the quality of dialogues was poor.
- Nearly half (48%) of readers felt that the topics were relevant to them.
- Over nine out of ten (91%) of readers felt that they knew how to post their contributions.

- Three quarters (78%) did not consider it to be necessary to know more about other contributors before posting their contributions.
- Almost three quarters (72%) of readers did not feel that groups were unwelcoming and that facilitators needed to be proactive in welcoming people.
- The long delay in gaining a response from a posting was not a problem for almost three fifths of readers (58%).
- Being busy was a problem for about almost three fifths of readers (58%)
- Almost two thirds of readers (63%) believed that their reason for not contributing was that no posting was required.

There was little indication here that technical issues provided barriers to making contributions. Also the social environment of the discussion forum was not a problem for most respondents – although the issue of anonymity might be an issue for some. Perhaps the NCSL context had successfully addressed these potential barriers. The barriers that remained for the research sample seemed to be predominantly about not being *required* to contribute, not having anything to add, and not having time to contribute.

Survey Section Five: IMPROVING PARTICIPANT ONLINE EXPERIENCE

- A third (33%) felt that specific training in how to contribute to online dialogues would be helpful.
- Two in five readers (40%) wanted specific training in the types of contributions which were possible.
- Almost a third would like peer mentors to help them (29%)
- Over two thirds (69%) did not want to see more anonymous discussions, with only 15% strongly in favour.
- Short examples of previous contributions would have been helpful to over half (57%), with 21% strongly against.
- Having feedback about how others had gained from contributions was important for almost half (47%)

Although 90% felt they knew how to post contributions (see results from Section Four) a third wanted training in how to contribute. This suggests that participants need more than knowledge of processes – confidence in using them might also be significant. In this context it is not surprising that mentoring, the provision of exemplars and the provision of feedback were all requested as potential improvements

Level Two Analysis – Relationship between responses to survey questions

Cross tabulation of readers' responses to questions was carried out in order to look for consistency or inconsistency around responses based on the same suggested barriers and motivational factors. Since the sample was not a statistically representative sample of any very meaningful population and the study was seen as a [case study of NCSL online communities rather than a survey or \(quasi-\) experimental study of online communities generally](#), we did not take a statistical approach to this issue. Instead we considered respondents who stated (by ticking the far left 'agreed' button on the questionnaire) that they most strongly "agreed" with a key statement, and investigated their responses to other questions that related to this key statement. Summaries of the analysis will be presented in this section. Detailed information about one such analysis is presented in Appendix Two to illustrate the process.

- a. If participants most strongly "agreed" with the statement that: ***it is easy to gain information through dialogues*** they also most strongly "agreed" that they could gain information for their school (Qu3.4) This would tend to support the idea that readers viewed dialogues as places to gain information since they also 'agreed' that discussions helped make sense of participant's problems (Qu3.6), allowing room for development (Qu3.7) but that there was no need to make a contribution (Qu4.1). They also strongly agreed that a diverse group was available online.
- b. Those who most strongly "agreed" with the idea that ***"I feel I have something to contribute that others might benefit from in online dialogues"*** also most strongly "agreed" that they could also gain information from reading online dialogues (Qu 3.4), 83% also said *they liked being able to decide when to participate* (Qu 3.9) and also believed that online discussions had great potential, especially when there was a diverse group of contributors (Qu 3.11). This might suggest that readers who recognised their own potential as contributors liked the autonomy to decide when they would take up the challenge of participating since they only 'partially agreed' that they liked the challenge of participating.
- c. Those who most strongly "agreed" that ***it is good feel part of an online group*** (Qu 3.1). 88% *also most strongly "agreed" that they liked being able to decide when I wish to participate* (Qu 3.9)

This would suggest that enjoying belonging might run alongside enjoyment of autonomous decisions about how they wished to belong. It might be that for them reading is a choice that doesn't make both impossible since they also agreed that they feel valued in online discussion group (Qu 3.2) and felt that they have something to contribute that others might benefit from in online dialogues. (Qu 3.3) They partially agreed that discussing online helps make sense of participant's problems. (Qu 3.6) and that online dialogue gives opportunities for development (Qu 3.7), that all types of contributions are valuable, giving information helps others analyse and move forward (Qu 3.8). This would tend to support their idea that they value online participation though feel that reading is a valuable activity. Readers appreciated the chance to reflect on how contributions relate to them, before replying (Qu 3.10) and agreed that online group learning has great potential - a diverse group has much to offer (Qu 3.11). Again they would appear to be making a choice to delay participation which is not in conflict with the value they place on the group and their membership of it.

- d. Those who most strongly 'agreed' that ***just reading and reflecting is enough - there is no need to respond*** made no other strongly agreed choices with the other questions in this dataset. They did however partially agree that they didn't feel posting is required (Qu 4.13) suggesting a belief in their autonomy as readers.
- e. Those who most strongly "agreed" ***I don't like my name appearing with my 'post' I would prefer to remain anonymous*** made no other choices though they did also agree that 'It is a big step to contribute. I feel inhibited about posting' (Qu 4.3) and 'I often have nothing to add - others have already responded in the way I would' (Qu 4.4). This might suggest that inhibition in posting is related to agency and self worth.
- f. Those who most strongly "agreed" ***I am put off by the amount to read, before I would feel ready to contribute*** made no other strongly agree choices though they did also partially agree that 'I often have nothing to add. Others have already responded in the way I would' (Qu 4.4). This presents a conflict between the idea that there is too much to read and the indication that they have read and been inhibited by others contribution.
- g. Those who most strongly "agreed" that ***I feel valued in online discussion groups*** also most strongly "agreed" that they could gain information that would be of benefit to their school from online dialogues (Qu 3.4). There was agreement that if they feel valued in online discussion groups then they would also have something to contribute that others could gain from (Qu 3.3), online discussions could help participants make sense of problems (Qu 3.6), has provided opportunities for development (Qu 3.7) and that all types of contributions are valuable (Qu 3.8). This might support the idea that readers feel their role as reader is a valid and important one that is open to change
- h. There was no other strong agreement from those who felt strongly ***that I would like short specific training about how to contribute to dialogues*** though they did agree the usefulness of short specific training about the possible types of contributions (Qu 5.2) and that short examples of previous useful contributions (Qu 5.6).
- i. There was other no strong agreement from those who agreed strongly that ***I am put off by the amount to read, before I would feel ready to contribute*** and any of the other statements. There was however agreement that there was often nothing to add as others have already responded in the way the participant would (Qu 4.4) and that being too busy to contribute was also a problem (Qu 4.10). This would be in agreement with f. above.
- j. There was no strong agreement that ***groups can feel unwelcoming - facilitators need to be proactive in welcoming people*** and any of the other statements. There was however agreement that it is good to feel part of an online group (Qu 3.1), that online group learning has great potential with a diverse group having much to offer (Qu 3.11) and that short examples of previous useful contributions would be helpful (Qu 5.6).

There is a strong sense from this analysis that reading is a deliberate choice, reflecting a view that it is not necessary to contribute. It allows participants to be part of the discussion group that they value, while making deliberate choices about when to participate more actively. It is consistent with seeing the online community as a source of information and insight into school development and into the problems faced by others. The gains to be made from reading were

seen as important. Barriers were less a factor, though suggestions were made for improvement in the online context through facilitation and training.

Level Three analysis – text responses

Looking at potential gains by readers the survey asked if someone '*reads more than they contribute*' to dialogues - what do you think t2l has to offer? The majority of comments were very positive and key benefits were thought to be: information gains, personal gains, social gains and contextual advantages. The most frequent response was that information was up-to-date and tested by peers so suggested solutions worked. Respondents felt they had gained inspiration, insights and stimulation to action through the discussions. The value of recent leadership research was highlighted as well as the chance to sift out the best ideas. Personal gains mentioned were reduction of isolation and increased confidence through validation of views. As they learned from other more experienced leaders they became aware of the strength and value of professional dialogue and national as well as local links. The online context was thought to give 'space' for reflection at ones own pace. "*I can gather all sides of a debate in one evening before i decide where i stand - like standing at a bar and listening to a discussion and not joining in but still being party to it all.*" And "*t2l mirrors "real" life - lots of talkers and more good listeners. For the reader - it broadens & enhances knowledge; it enables one to reflect on current thinking & trends.*"

Looking at *good examples* of use of online discussions useful 'purposes' for forums were described by readers. Forums were used to keep in touch though this might mean simply reading discussions. Forums were described as a means of being in contact with mentors coaches and tutors. Forums providing case studies were valued as well as those with a specific relevant often narrow focus. Discussions were described as "*personalised learning spaces with links and articles that are useful*" The role of the host or facilitator was highlighted "*A good online dialogue is where the person in the hot seat feeds back regularly and summarises main thinking points and is open to discussion*"

Considering how to improve '*information gathering*' for participants in talk2learn the text responses fell into three groups. The first group looked at the site itself and advocated faster more intuitive navigation, a better search facility, a history trail, a reduction in content and linkage from one place. There was also a wish for simple voting tools for those who weren't ready to offer full responses a link again to LPP. The second group of responses looked in more depth at the nature of the discussions and advocated summaries as time savers in lengthy discussions. There were suggestions about editing, again to speed up reading. Good facilitation for maintaining quality dialogue was thought to be essential as well as for summarising. The third set of comments looked in greater depth at summaries and felt short bulleted lists were best, especially with sub headings and threads of comments. The use of other summary formats like mind maps was also suggested.

In response to the summarising question about *other benefits from online interaction*, skill gain (particularly IT skill) was highlighted. Time saving in terms of travel and convenience and freedom of access were again mentioned. For readers safety was a factor as the environment allowed "*safe development at your own rate benefiting from the vast experience of others .. you don't 'Have' to contribute to you can dip in and choose whether to or not - you're not 'struck off' because you don't contribute.*" As a professional environment the stimulation provided was mentioned frequently "*I have seen others raising issues that I have not thought about .. there are always diverse opinions about education which makes one think!*". Even when not contributing in the forum, links were made through personal notes and the generosity of colleagues was much appreciated "*our field of contacts is huge now what a great bonus to have all these contacts and not leave our schools*"

In response to the question exploring *barriers to participation* lack of confidence was often mentioned. This included confidence in terms of knowledge, fear of being boring or repetitive, fear of looking foolish and fear of the high status of other contributors. Time to assess and feel comfortable was thought to be important *"I have to make the effort to gel with the group as sometimes communities feel too big and seem impersonal"* and the 'gain;time spent 'ratio had to be favourable. On the other hand some readers wanted a faster process as delayed response was felt to be a barrier. Feedback was valued in reducing the isolation barrier *"It is good when the facilitator uses my name and the response feels as if they thought about my contribution."* The lack of visual signals was seen by some as a barrier. Lack of relevance inhibited some respondents. Some felt more security in term of knowledge of community membership was needed *"I would have to know somebody really well before I would offer any opinions about how to run their school."* This would accord with Wenger's views about the importance of sharing identity for community formation. Technical issues were less frequently talked about, though access speeds and unclear navigation were mentioned as barriers in terms of time loss.

The summary question asking for other thoughts about improving the participant online experience produced many comments about improving the learning experience through summarising and this was tied to time pressure. A wish for training was expressed by a small minority including training in the best types of contribution. *"I really would like to see an opportunity to put into practice the theory.. I want a series of questions and or tasks where I could practice analysing the data/information and giving my views."* There were many suggestions about improving the knowledge gathering indicated in previous sections and a number about making the experience more welcoming - for instance through setting up groups that have much in common. Intermediate steps for readers (LPP) were again suggested *"Provide an option for just clicking to say that you have enjoyed reading the contributions but do not have anything further to contribute"*

Discussion

Some specific links between our findings and those reported in the literature have been included in our report of results above. More general issues are discussed below.

The responses gave no sense that readers felt disadvantaged through a lack of accommodation to their learning process as Schober and Clark (1989) have suggested. They did not feel the need for welcome into the group. Many agreed that they gained useful information from reading: indeed the fact that reading online discussion fulfilled this need could be a reason for their decision not to participate more actively. However, some participants did request changes to *improve* access to information and welcomed knowledge management techniques such as weaving and summarising. This is interesting as Schober and Clark also suggest that improved access to information might be achieved through interaction and questioning. Perhaps those who simply seek information from online forums could be persuaded of the need to participate actively by altering their view of the role of discussion in accessing information in a usable form.

There was no sense that readers felt they were failing to contribute to the common good (Preece 2000). In fact there was a clear message that they saw a value in simply receiving information - to help them analyse and move forward as suggested by Nonnecke & Preece, 2003. They did not appear to feel a duty to contribute themselves. Perhaps they felt that their major contribution to the common good was in the use of information gained in their own professional context and not in the development of argument in general. This is consistent with Biesta (2007) who argues that the idea of evidence-based education confines the role of research to one of providing teachers with specific techniques through the generation of knowledge about 'what works.' Teachers seeking information to improve practice may be viewing their engagement with the t2l community in this way. A consequent risk is that the privileging of this role of research leads to an undervaluing of a broader role for research in which it provides practitioners with ways of understanding and analysing their practice differently. This may be the case for 'readers' because an important process in any shift in

underlying understanding of practice is surely discussion of personal ideas and responses – even when these are tentative or partly formed.

There was a strong indication that reading was due to choice rather than constraint. However it seems likely that a continuum exists with some readers making suggestions that might create opportunities for them to contribute. This supports the view put forward by Nonnecke & Preece, 2003 that there may be many individual reasons why participants choose not to post.

The reasons that previous researchers offer to explain failure to contribute, were clearly not always in line with the views of our group of readers. Our readers mostly disagreed that they felt inhibited or uncomfortable in the online group and did not want to know more about other participants. The suggestion by Katz (1998) that anonymity would encourage posting was also not supported by many of these respondents, though it may have been an influence for some. It appears that steps to build up identity sharing and hence engagement with the online group might not be as useful in leading to contribution as Beaudouin and Vekovska (1999) have suggested.

Similarly, technical incompetence (Mason 1999) did not appear to be acknowledged as a barrier to active participation and respondents mostly did not wish for training in *how* to post. However respondents did feel that they had nothing to contribute and more than half agreed it would be useful to have guidance in *what* to post.

There was support for Walther, Burgoon, and Park's view that readers feel that they are too busy to contribute. However they were not put off by the amount to read - which may well be considered by them as time well spent for the gains to be made through accessing the ideas of contributors and the relevance of topics in discussions.

In terms of motivational 'reasons for action' (Seddon Postlethwaite and Skinner 2008) challenge and interaction did not appear to be highly valued. However there was some support for the idea that - if they contributed - feedback about post usefulness would be welcomed. Such appreciation is also one type of incentive gratification or reward described by Newhagen and Rafaeli (1996).

The driver that was highly supported was autonomy – they valued the ability to choose the role of reader. The fact that they were not required to perform and could 'do their best' as members of the group appeared to be very important to these readers who came into the online communities because they valued the access to resources (Marin and Wellman 2010)

This provides us with a picture of participant who choose to read the contributions of others without feeling a need to post. They value the information to be made through doing this and sought improvements in access. There were some in this group who might post if exemplars and 'intermediate activities were provided and they would then welcome approval from peers

In addition to these insights that are related to the literature , specific actions points led from this research in order to improve the online experience for t2l members. These included:

- Celebration and appreciation of the importance and value of reading and recognition that it might be Legitimate Peripheral Participation.
- Facilitation of a balance between respecting reader autonomy (respecting choice) and ensuring that a feeling of belonging was possible.
- Recognition that information needs to be made more easily accessible since for some the information gained from reading was an end in itself and proved useful in their professional life
- Provision of effective facilitation and scaffolding toward participation where desired, as for some it could be that contribution would be a welcome next step. This led to the creation of an online facilitation toolkit which is available at [e-learning facilitation toolkit](#) (follow the link then click 'launch'). The research also supported the construction of the

model for self-evaluation and facilitation of co-construction of knowledge through online interaction. (Seddon and Postlethwaite 2007)

- Provision of mentoring. The research led to the creation of peer mentors who were trained to give assistance when requested through an online forum in t2l.
- Time pressure was one barrier that was addressed through technical improvements
- Although contributions offer a ready means of judging impact of online participation this research suggests that being able to assess the numbers of readers offers another type of impact that gives a broader understanding of online engagement

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Appendix One

A SURVEY TO IMPROVE THE TALK2LEARN EXPERIENCE

Please help us with this survey for talk2learn participants. Insights gained from the survey will help our facilitation of online communities. This will improve our offer to school leaders. The survey is brief and is contained fully on one page; please complete all questions. Most questions ask you to `rate` statements, some ask for suggestions, or more detail.

Closing date: Wednesday 07 June 2006

All responses in Sections 3-5 below use a four point Likert-type response format "AGREE DISAGREE" unless indicated as free text.

Section 1: CONTACT DETAILS

Name:

Section 2: BACKGROUND

- 2.1. How often do you log on to talk2learn? (drop down choices: daily, weekly, monthly, annually)
- 2.2. Where would you place your most common type of participation? (Read.. ..Contribute)
- 2.3. If someone `reads more than they contribute` to dialogues - what do you think t2l has to offer? (free text)
- 2.4. Can you give us an example of a particularly good online dialogue - with a reason for choosing it. (free text)
- 2.5. It is easy to gain information through dialogues. (agree disagree)
- 2.6. How could `information gathering` be improved for participants in talk2learn e.g. bullet point summaries, weaving (grouping responses). (free text)

Section 3: SUGGESTIONS ABOUT BENEFITS OF ONLINE INTERACTION

Please look at some of these suggested benefits from online interaction and let us know how correct you think they are:

- 3.1. It is good feel part of an online group.
- 3.2. I feel valued in online discussion groups.
- 3.3. I feel I have something to contribute that others might benefit from in online dialogues.
- 3.4. I feel I can gain information that will be of benefit to my school from online dialogues.
- 3.5. I like the challenge of participating online.

- 3.6. Discussing online helps make sense of participants' problems.
- 3.7. Online dialogue has given me opportunities for development.
- 3.8. All types of contributions are valuable, giving information helps others analyse and move forward.
- 3.9. I like being able to decide when I wish to participate.
- 3.10. I appreciate the chance to reflect on how contributions relate to me, before replying.
- 3.11. Online group learning has great potential - a diverse group has much to offer.
- 3.12. Please add other suggestions about benefits from online interaction. (free text)

Section 4: SUGGESTIONS ABOUT BARRIERS TO ONLINE INTERACTION

The list below are reasons given for not taking part in online dialogues .. which do you think are most relevant.?

- 4.1. Just reading and reflecting is enough - there is no need to respond.
- 4.2. I don't like my name appearing with my 'post' I would prefer to remain anonymous.
- 4.3. It is a big step to contribute. I feel inhibited about posting.
- 4.4. I often have nothing to add. Others have already responded in the way I would.
- 4.5. I am put off by the amount to read, before I would feel ready to contribute.
- 4.6. I often feel the quality of the messages is poor.
- 4.7. Many dialogues are on topics that are of no relevance to me.
- 4.8. I am not sure how to post to a dialogue.
- 4.9. I like to know more about the other contributors before joining in.
- 4.10. Groups can feel unwelcoming - facilitators need to be proactive in welcoming people.
- 4.11. I am put off by the long delay before gaining a response to postings.
- 4.12. I am just too busy - there is not enough time to contribute.
- 4.13. I don't feel posting is required.
- 4.14. Please share any other thoughts about barriers to contributing to online dialogues. (free text)

Section 5: IMPROVING PARTICIPANT ONLINE EXPERIENCE

Do you think these suggestions for an improved experience are helpful?

- 5.1. I would like short specific training about how to contribute to dialogues.

- 5.2. I would like short specific training about what types of contribution are possible.
- 5.3. I would like some help from peers as mentors.
- 5.4. I would like more anonymous discussions.
- 5.5. It would be helpful to know how others have gained from my contributions.
- 5.6. Short examples of previous useful contributions would be helpful.
- 5.7. Please share any other thoughts about improving participant online experience. (free text)

Thank you for completing this questionnaire, please press submit.

Appendix Two

An example of Level 2 analysis based on the dataset related to Q. 2.5

If participants strongly agreed that: *it is easy to gain information through dialogues*, then their responses to the following related questions are set out below.

	3.3 I feel I have something to contribute that others might benefit from in online dialogues.	3.4 I feel I can gain information that will be of benefit to my school from online dialogues.	3.6 Discussing online helps make sense of participant's problems.	3.7 Online dialogue has given me opportunities for development.	3.11 Online group learning has great potential - a diverse group has much to offer.	4.1: Just reading and reflecting is enough - there is no need to respond.
Agree 1	22% - 19	73% - 62	36% - 31	39% - 33	58% - 49	36% - 31
2	41% - 35	25% - 21	42% - 36	40% - 34	39% - 33	44% - 37
3	35% - 30	2% - 2	15% - 13	13% - 11	2% - 2	12% - 10
Disagree 4	1% - 1	0% -	6% - 5	8% - 7	1% - 1	8% - 7