



> INSTEP Consolidation Phase – Online Communities of Practice

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> Executive Summary

The project reflects the increasing importance of the online world in all aspects of the professional lives of educators, including inservice teacher educators who work online. Professional interaction conducted through online communities of practice is already significantly impacting on teacher professional learning and that impact will undoubtedly increase.

This project explored the degree to which the principles of effective inservice teacher education could inform professional learning in online communities of teachers. Aligned with this was a desire to ascertain which deliberate acts of intervention from online moderators had the most impact on deepening the pedagogical focus of these communities.

This was achieved through the involvement of a number of current moderators of online communities who trialled a range of interventions to ascertain which had the most impact on focusing discussion on learning and teaching and which resulted in larger numbers of members joining discussions. These moderators, along with members of their online communities, were then interviewed to gain their perspectives on effective practice in online moderation. Members of participating communities were also surveyed to gain a broader perspective.

The key findings from the project were focused on:

- the issues, behaviours and interventions which are salient to anyone involved in online professional learning. These are summarised in the protocols for online facilitation, aligned to the Inservice Teacher Education Project (INSTEP) principles, which are included in appendix one
- the behaviour of online moderators because the effectiveness of any online community is due in large part to the moderator's inter-personal skills, domain knowledge, networks and ability to develop leadership
- the views of both moderators and members of online communities who view such communities as having a positive impact on practice and increasingly vital to the formal and informal professional learning of educators
- the strong (but not total) alignment between the principles of INSTEP and effective online moderation.

As more collaborative tools are created, there will be greater opportunities to enrich online professional learning which provides participants with strong leadership yet also allows them to have ownership over their own learning, develop their own leadership, be exposed to new thinking, explore their own pedagogy and that of others and enjoy the social networking which is fundamental to professional relationships in both the on and off-line world. We hope this report is helpful to those responsible for creating and leading such communities.

> Introduction

Background

In January 2008, Cognition Consulting Ltd (Cognition) was engaged by the Ministry of Education (MOE) to participate in the consolidation phase of the wider Inservice Teacher Education Project (INSTEP). The purpose of the consolidation phase was to strengthen and extend the outcomes of the first three phases of the INSTEP project.

Cognition's project involved inservice teacher educators (ISTEs) who operate in an online environment. It focused on the improved practice of ISTEs who had had no previous involvement in the project and who were operating in an online world where considerable *informal* professional learning was taking place.

Cognition's project aimed to:

- explore in more depth the use of online communities for professional learning
- enhance the work of inservice teacher educators who currently function as online moderators
- focus on sustainability of INSTEP goals through e-learning.

Communities of Practice

We explored ways to work with our online moderators to improve practice through deliberate interventions which attempted to align the principles of effective inservice teacher education, with the limited research and anecdotal evidence about developing effective online communities of practice. We used Lai et al's (2006) definition of a community of practice as the basis of shared understanding applicable to an online setting¹. We also used Etienne Wenger's work on communities of practice² as a basis for our discussions in the moderator workshops.

Lai et al argued that formation of communities of practice are central to effective teacher professional development and that these require a shift in emphasis from formal training to learning in practice. Such communities "go beyond traditional one-off and face-to-face models of event-based, expert-novice professional development and allow teachers to act as co-producers of knowledge. This requires greater personal responsibility for professional growth" (P 22).

¹ Characteristics of a community of practice include:

- 'Practice' as the unifying feature of the community
- Relationships that are grounded in information exchange and knowledge
- Shared learning, which may also occur effectively at the boundaries/peripheries of the community
- Membership ranging from novices to old-timers

From: Kwok Wing Lai; Pratt, K; Anderson, M and Stigter, J (2006) *Literature Review and Synthesis: Online Communities of Practice*, Ministry of Education, Wellington (P 10) Communities of Practice

- Communities are about negotiating a joint enterprise
- Communities of practice function through mutual engagement
- Members of communities of practice develop a shared repertoire of communal resources
- The process of learning and the process of membership in a community of practice are inseparable.

From: Kwok Wing Lai; Pratt, K; Anderson, M and Stigter, J (2006) *Literature Review and Synthesis: Online Communities of Practice*, Ministry of Education, Wellington (P 22)

² Wenger E Communities of Practice: A Brief Introduction Available: <http://www.ewenger.com/theory/index.htm>

Communities of practice can:

- provide professional learning which is situated and authentic
- help change instructional practice and strategies
- support change of beliefs and attitudes towards teaching
- facilitate knowledge sharing and creation
- change the role of teachers to co-learners
- facilitate identity building
- reduce teacher isolation.

Lai et al also noted that currently, communities of practice are only infrequently used for teacher professional development. However, about 2650 teachers in total were subscribed to the communities that Cognition was responsible for at project initiation (*English, ESOL and Arts Online*). As well, 500–700 teachers per year participated in short-term, online workshops facilitated by community moderators or invited guests. In addition, there exists a range of small and large online communities for other curriculum groups, principals, ICT specialists etc. Contributing to higher quality facilitation and professional learning through these online communities was therefore likely to have a significant impact on New Zealand education.

Project goals

The INSTEP theory of improvement is predicated on these five principles:

Effective ISTE learning and practice:

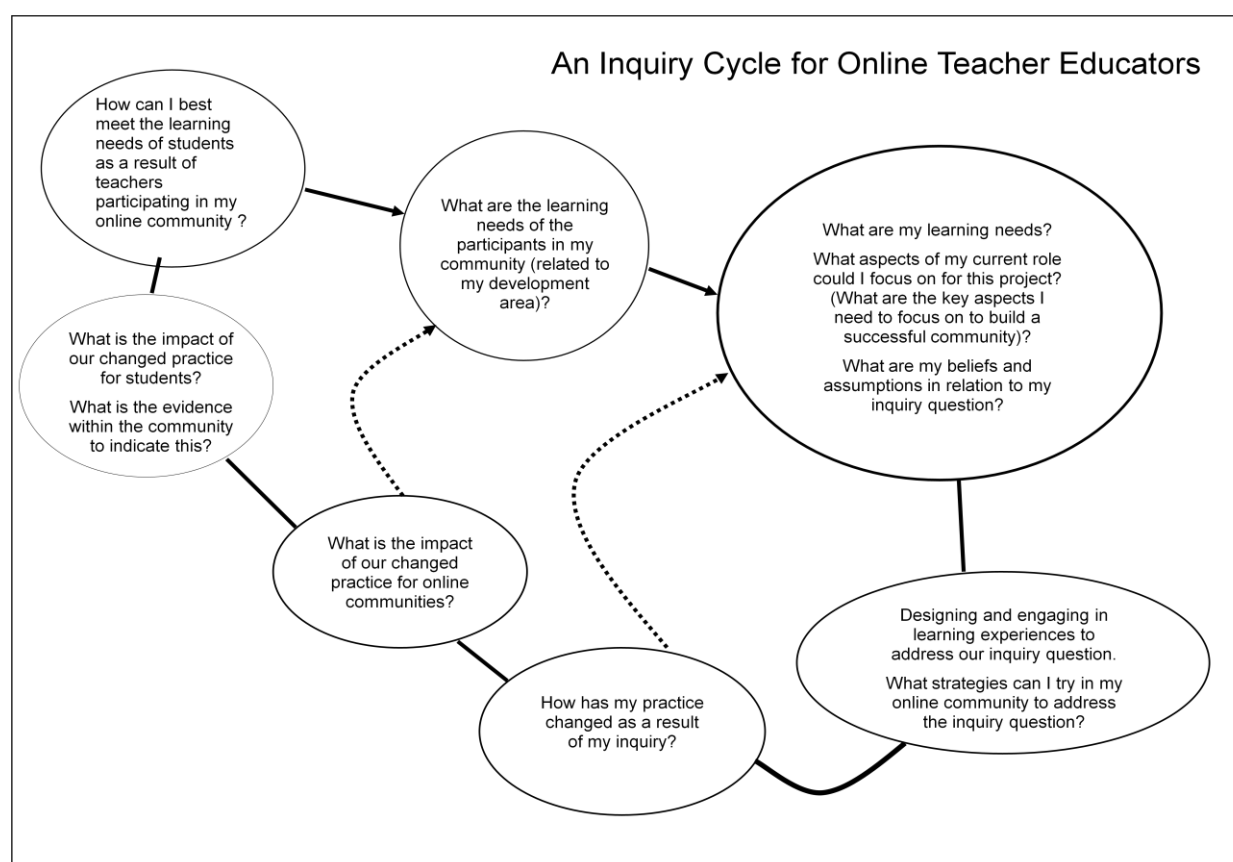
1. leads to improvements in teacher practice and student outcomes
2. is underpinned by inquiry and research evidence
3. is developed through collaborative relationships
4. is influenced by and responsive to context and culture
5. provides and builds leadership in a range of contexts.

Our project aimed to explore how relevant these principles are for online communities, as well as how they might be exemplified (or not) in an online environment. The principles, alongside our prior knowledge of online communities, would be used to inform the development of a set of protocols (see appendix one) which we saw as a key outcome of the project. In developing those protocols, we focused on supporting online moderators by:

- encouraging a shift to more effective online education/facilitation through exploring and trialing approaches which encouraged changed practice
- assisting in identifying interventions which might lead to more engagement from community members and a shift toward more pedagogically focused conversations
- gathering and analysis of data to show the impact of moderator interventions on activity, engagement and the quality of interactions.

> ISTE Inquiry and Knowledge-Building Cycle

The ISTE inquiry cycle builds on *An Inquiry and Knowledge-Building Cycle for Inservice Teacher Educators* (Ministry of Education, 2008)³. In its assumption of a sustained and relatively structured engagement between an inservice teacher educator and a teacher, this cycle appeared more relevant to face-to-face than online professional development. Hence we modified it to better reflect the reality of the somewhat more random and ad hoc relationships which characterise online communities. The key changes on the cycle were around “changed impact for students”. Given the relatively modest scope of the project, data about student achievement could only be derived from community member reporting and hence had limited reliability. However, triangulation against other data we collected indicates that positive changes in teacher actions and resources may indeed impact on student achievement. The Findings section provides discussion of this.



³ Ministry of Education (2008) *Kit e Aoturoa: Improving Inservice Teacher Educator Learning and Practice*, Learning Media Wellington

> Project Challenges

This project has not been without its challenges, including:

- moderators' confidence to frame and use interventions which aligned with their inquiry focus (in what are non-structured, fluid and very public environments).
- the fact that some moderator interventions/posts caused few or no ripples in the online discussion while others, similar in nature, generated a significant response, challenged our ability to generalise
- the relative anonymity and random contribution and participation of community members
- time constraints on moderators
- delays in provision of communicative tools on the new *Social Sciences Online* platform
- multiple threads running at any one time within a community made it difficult to retain focus on a particular intervention
- as mentioned, the difficulty of determining the impact on student outcomes.

> Methodology

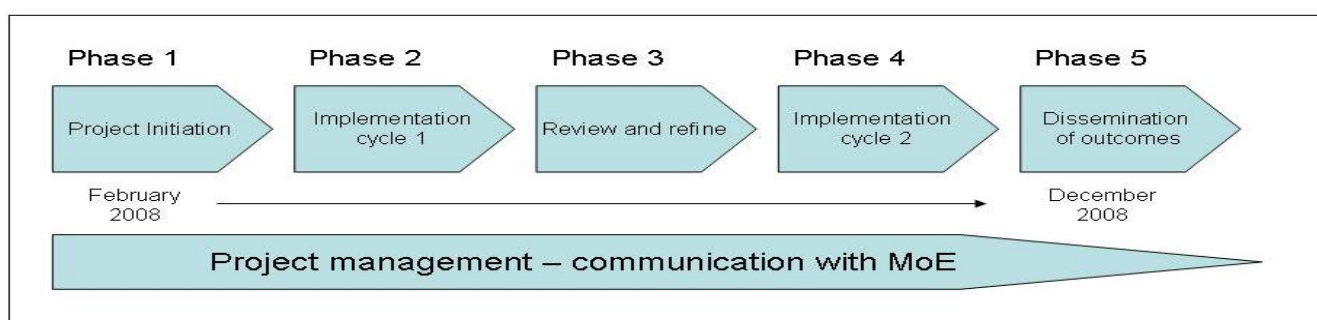
Introduction

The project team used a mixed-method approach involving a combination of moderator data gathering, interviews with community participants and moderators, analysis of community archives and an online survey of community participants. The rationale for this approach is included under Sources of Evidence below.

The project structure

The project was structured around five key stages. This was intended to ensure that we had multiple opportunities to refine and review approaches, given the relatively nascent field we were exploring and the fluidity of these communities. The phases are outlined in Figure 2 below:

Figure 2: Project Structure



Phase 1 – Project initiation

A face-to-face workshop with the project participants was held to inform them about project requirements, critique and develop initial documentation, explore examples of effective strategies in online communities and capture a brief 'before' snapshot showing their current thinking about their role. A key outcome of this phase was the development of a set of draft protocols for effective online facilitation. Participants were asked to identify an area of inquiry using the protocols.

Phase 2 – Project implementation – Cycle 1

This involved the implementation and analysis of the identified strategies based on each moderator's selected inquiry areas (see below). Any evidence in support of the area of inquiry was collated and documented on the data gathering template (see appendix two).

Phase 3 – Review and refine

The second face-to-face workshop reviewed the impact of interventions and included:

- discussion of their inquiry progress, challenges and initial findings
- sharing examples of threads that supported their inquiry foci and analysis of responses
- sharing strategies and different approaches for next steps for data gathering
- identifying potential interviewees from among community members and reviewing the interview schedules.

The project team also further refined the protocols by aligning these to the five INSTEP principles. The inquiry cycle was discussed further and it was decided to change the student impact section as outlined above. In acknowledgement of the fact that some previous interventions did not have the desired effect on participation, identification of next step interventions enabled the project team to explore a range of alternatives.

Phase 4 – Project implementation – Cycle 2

This phase focused on further implementation and trialling of strategies within communities. Interviews were held with moderators and participants (appendix three contains the interview schedules).

Phase 5 – Dissemination of outcomes

This phase included the drafting, critical review and publication of this report.

The project participants

The initial proposal included seven online moderators from the following online communities:

- *Arts Online* which comprised five established communities, with the moderators of Visartsnet (Visual Arts) and Primaryartsnet participating
- *Social Sciences Online* which was supposed to comprise four communities which were in the process of being established

Because of delays in provision of the *Social Sciences Online* communication tools (in this case, a mailing list) these moderators were unable to participate in the project. We therefore invited the following to participate:

- National Aspiring Principals Programme (NAPP) – with inclusion of the Hamilton and Whakatane online communities.
- The NCEA English community.

We also included the project leader for *Arts Online* who provided an overview of all *Arts Online* communities. These moderators were all experienced in working online.

Table One: Online Community profiles

Arts Online Community Profile	
<p>Primaryartsnet – 154 members Visartsnet – 396 members Musicnet – 406 members Dramanet – 358 members Dancenet – 228 members Arthistorynet – 167 members</p>	<p><i>Arts Online</i> comprises a number of communities. With the exception of Arthistorynet and Primaryarts net (2006), all of these were established in 2004. This project included the moderators for Primaryartsnet and Visartsnet. <i>Arts Online</i> has an overall project leader who monitors and supports all of these communities.</p> <p>The communities are conducted via email mailing list (listserv) and are open to all interested educators. Each community is described as “a place to air views, share ideas, request help and resources and establish professional relationships”.</p> <p>All communities are pre-moderated by the project leader.</p>
National Aspiring Principals Programme (NAPP) Community Profile	
<p>Both the Hamilton and Whakatane communities participated, comprising 20 participants plus the Leadership and Management Adviser and the moderator.</p> <p>The communities ceased to be active at the end of Term 3 2008 as the NAPP programme came to an end.</p>	<p>Established in late February 2008 to coincide with the start of the NAPP inservice training programme, this comprised six communities from across New Zealand.</p> <p>This community aimed to:</p> <ul style="list-style-type: none"> ■ support learning about school leadership provided in a residential programme ■ encourage participants to “speak confidentially” with their peers as they learn and widen their informal leadership network.

NCEA English Community Profile	
395 members	<p>This community, also conducted via listserv, is part of <i>English Online</i> and focuses specifically on supporting NCEA English. The NCEA Forum is open to all teachers of English to:</p> <ul style="list-style-type: none"> ■ ask for and share NCEA related resources ■ share and seek advice on NCEA programme design ■ share and seek advice on programme management and moderation ■ share and seek advice on school policy issues such as re-assessment ■ comment on individual achievement standards ■ share successes and challenges ■ suggest resources which <i>English Online</i> should develop ■ discuss any other NCEA related matters.

Sources of data

We used data from:

- the moderators which they collated to address their inquiry question
- interviews with moderators
- moderator workshops
- ongoing communication with the moderators
- interviews with selected community members
- a survey of community participants.

The choice of these data reflect:

- a desire to include a mix of qualitative and quantitative data
- the relatively limited scale of the project
- the need to include multiple perspectives
- the structure of the project.

Sources of Evidence – Community moderators

Workshops/meetings

The project leader held two face-to-face workshops with online community moderators. These included discussion of their understanding of their current role and how that may have changed over the duration of the project. These workshops aimed to highlight effective practice, develop documentation, discuss inquiry questions and identify potential strategies to address these.

From these meetings, the project team developed tools to provide moderators with a starting point for defining improved practice within an online community. The first of these were the draft protocols for effective online facilitation. These were then refined and augmented with examples of effective practice and aligned with the INSTEP principles (appendix one is the final version).

Inquiry foci

The ISTE “theory of improvement” suggests that effective practice leads to improvement in teacher practice and student outcomes and therefore ISTE’s need to base practice on evidence generated by questions and dilemmas within their own practice. Through discussion of the online protocols and based on knowledge of their communities and their role, the moderators were able to identify an inquiry question. The identified inquiry questions from each moderator are in table 2 below:

Table 2: Community Moderator Inquiry Focus

Participant	Inquiry area
Primaryartsnet	How can I focus the community on the practice of teaching and learning in arts (currently this community is focused on events). Strategies identified: <ul style="list-style-type: none"> ■ thoughtful questioning ■ engagement with supplied resources and encouraging feedback and contributions ■ engaging other participants to join group from advisor/lecturer community.
Visartsnet	How can I engage teachers in pedagogical dialogue and development of reflective practice? Strategies identified: <ul style="list-style-type: none"> ■ connecting Visartsnet to other networks to ensure they respond to the needs of the community to provide specific professional learning support ■ developing a student gallery as a context for teacher engagement around student work.
NAPP	How can I use an online community to strengthen learning processes for participants in the National Aspiring Principals Pilot Programme (NAPP)? Strategies identified: <ul style="list-style-type: none"> ■ a focus on using the community as part of participants’ reflection on their learning ■ using shared learning experiences related to principalship (learning with principals, carrying out an action leadership project).
NCEA English	How can I enhance teachers’ understandings of how the key competencies/ effective pedagogies underpinning the NZ Curriculum relate to the aspect(s) of English teaching/assessment that are being discussed? Strategies identified: <ul style="list-style-type: none"> ■ using open questions that invite reflection/discussion ■ providing further references /reading material to support discussions ■ providing examples/models /resources promoting a ‘what this might look like in the classroom’ approach for critique.

At the workshops, we discussed strategies the moderators could use as inquiry-related interventions. The template (see appendix two) required moderators to identify the strategies they used, the alignment to the protocols and the overarching INSTEP principle, along with examples of the community response and moderator reflection.

Moderator interviews

Aside from defining their perceptions about their role, each moderator was also interviewed to find out how their practice and thinking had changed over the course of the project and their views about the extent to which online communities could support deeper professional learning. They answered questions about their beliefs about their role, the barriers to enhanced participation and greater depth of discussion, and whether community dialogue impacted on practice and student outcomes (see appendix 3).

Sources of Evidence – Community members

The project team identified 17 participants to be interviewed. These were drawn from all participating communities and representing varying levels of engagement (active, occasional participants or 'lurkers'⁴). They were interviewed either face-to-face or by telephone. The questions were based around their use of the community, any changed practice as a result of being involved in the community and perceived strengths and barriers to involvement (see appendix 3 for the interview schedules).

Online survey

A brief online survey was conducted to gauge wider community member perception about their use of online communities, perceived benefits and impact on student learning (see appendix 4 for the online survey questions).

Ethical procedures

All participants were volunteers and received full project disclosure at the outset and were promised anonymity in any publication. Appendix five is a template moderators used in their community to inform participants about their participation in the project.

⁴ A lurker is one who belongs to an online environment but does not participate.

> Findings

In this section we seek to align the limited data we have gathered with the five INSTEP principles. In this small scale project our sources of data were limited to:

- interviews with five moderators
- interviews with 17 community members
- a survey responded to by 186 community members.

Effective ISTE learning and practice lead to improvements in teacher practice and student outcomes

Moderator Interviews

As mentioned, the gathering of empirical evidence about the impact on student learning outcomes of teachers' participation in online communities was beyond the scope of this project. Indeed, disentangling the variables which impact on student achievement would challenge a much larger project. However, the perceptions of community members are of interest in this regard (see the survey results below).

The moderators reported using several strategies to try to engage members in more in-depth, pedagogically focused discussion. The first was to pose open, challenging and provocative questions. However, responses to these deliberate posts or questions were variable and it was difficult to analyse or predict which sort of post would elicit the biggest response.

In one thread, a moderator reflected that most responses came as a result of reference to specific topical issues, such as the NCEA standards review. This discussion obviously had considerable salience for the community. Fifty two percent of responses to this thread resulted from open questions, in which the community were asked to reflect on their own practice and to "draw on best practice evidence, as well as their own contexts and experiences".

This moderator found that asking for direct responses from teachers about their own practice often elicited a nil response but posts which were framed within discussions meaningful to teachers' own practice and context and within threads that were 'collaborative and collegial in nature' elicited substantial, reflective responses. For example, the following moderator post:

"How do we convey what is important? Is it by testing it, allocating credits to it, reporting on it? Or...Is it by the way we invest time in it, talk about it, work through it, giving students several opportunities to develop their skills in it without having to have the stress of jumping through an assessment hoop. Will students ever see work as important for reasons other than it has credits attached to it? How can we stop talking about NCEA, in the language of NCEA (which is after all, just an assessment tool) and use the language of English to validate what the students do, holding off on the NCEA discussions until absolutely necessary?"

This post, which was embedded in addressing the daily, pragmatic concerns of teachers (as signalled by earlier posts) provoked 10 members to share their own examples of non traditional practice.

Moderators found that deliberate interventions which were positive and encouraging "appeared to extend the life-cycle of the thread", for example, this moderator comment which focused on sustaining discussion in the middle of a thread:

"Is this realistic in your view? How can we plan senior programmes next year that offer a 'fair' number of credits but, at the same time, begin to move summative assessment out of the spotlight in favour of the kind of developmental approach to English that Brian has referred to? Is it in our power, at all, to reduce the 'credit-grabbing' approach? Do we want to?"

Another moderator provided the following encouraging reflection on a thread:

"It has been really interesting to read all the contributions to recent discussions re: the NCEA review over the last few weeks. A number of you have touched on programme design, credit balance/parity, how to convey 'what's important?', as well as several of you kindly sharing examples of senior programmes."

concluding that:

"discussion did move from sharing practice of school approach or initiatives to actual in-class strategies, with evidence on reflection on the experiences for students ie actual student involvement."

Such interventions, within the context of teacher initiated (sometimes more prosaic) concerns appeared to be effective in focusing the discussion on pedagogically informed planning.

Another strategy which appeared promising in terms of impact on teacher practice, was to insert relevant material, for example research or resources relevant to the thread, into emerging discussion. One participant commenting on the effectiveness of his/her community moderator, appreciated the use of:

".....Provision of cutting edge resources that are themselves provocative, that lead people to question their position and why".

As a result of a deliberate team strategy, *Arts Online* moderators drew lengthy threads to a close and provided a summary of the discussion. This was useful for members who had just joined or were trying to follow the sometimes lengthy threads but, most importantly, for drawing out the key pedagogical messages of a thread. One moderator did this through:

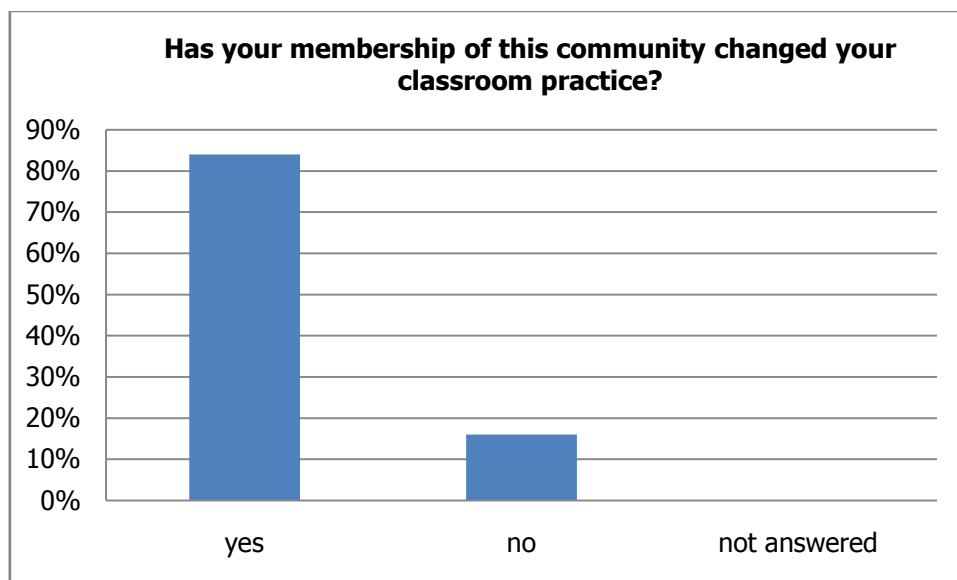
"presenting a couple of tables to show the range and breadth of discussion. Unfortunately it was sometime before I was able to do this and when I did post it, no one responded. I wanted to represent the range of contributions, because I wanted people to consider their own position in the debate, but also wanted everyone to feel valued for their posts."

Apart from providing a useful model for summarising sometimes complex (even chaotic) threads, her comment underscores the need for immediacy – for seizing the moment, if moderator interventions are to have the greatest impact on teacher practice.

Participant Survey

Our online survey was an attempt to statistically gauge the wider impact of these online communities on teacher practice and student outcomes. The questions and subsequent findings are presented below.

Graph 1

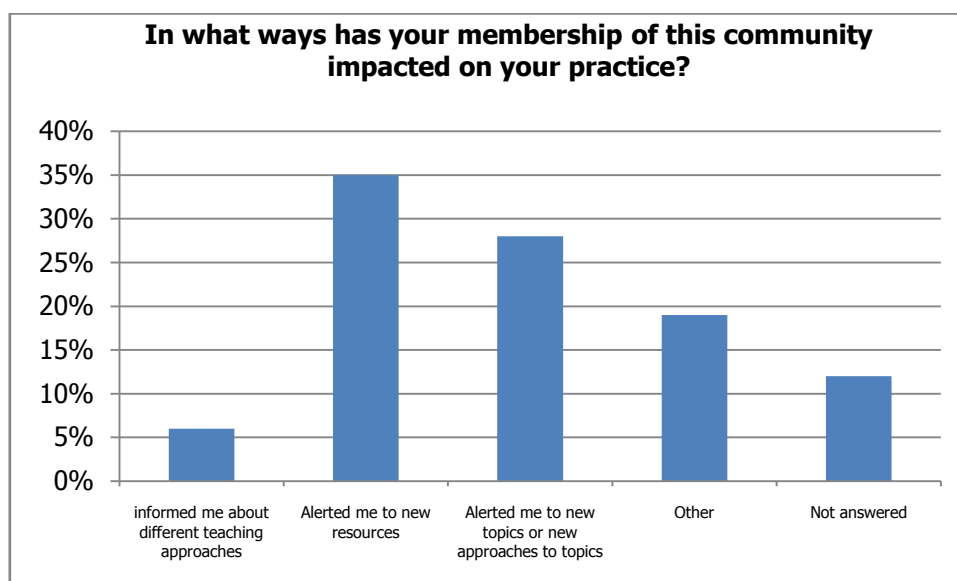


As shown in graph 1, community members were reasonably unequivocal in affirming the professional impact of their membership of an online community. A follow-up question asked those who had answered “no”, to provide reasons for the lack of impact and this group (comprising approximately 15%). They mentioned:

- discussion doesn't focus on classroom practice 5
- discussions confirms what I'm doing anyway 4
- I'm not a teacher 4
- discussion is secondary focused and I'm a primary teacher 3
- discussion is trivial 3
- I'm new to the community 3.

Those who answered “yes” were asked to explain how their community membership had impacted on their practice. As can be seen in graph 2 below, knowledge of new resources and new topics were clearly important. *All* of those who selected ‘other’ indicated that they viewed “all of the above” as impacting on their practice.

Graph 2



Many respondents included personal anecdotes of how valuable a particular community interaction had been to their professional learning, confidence and careers. These ranged from the general, for example:

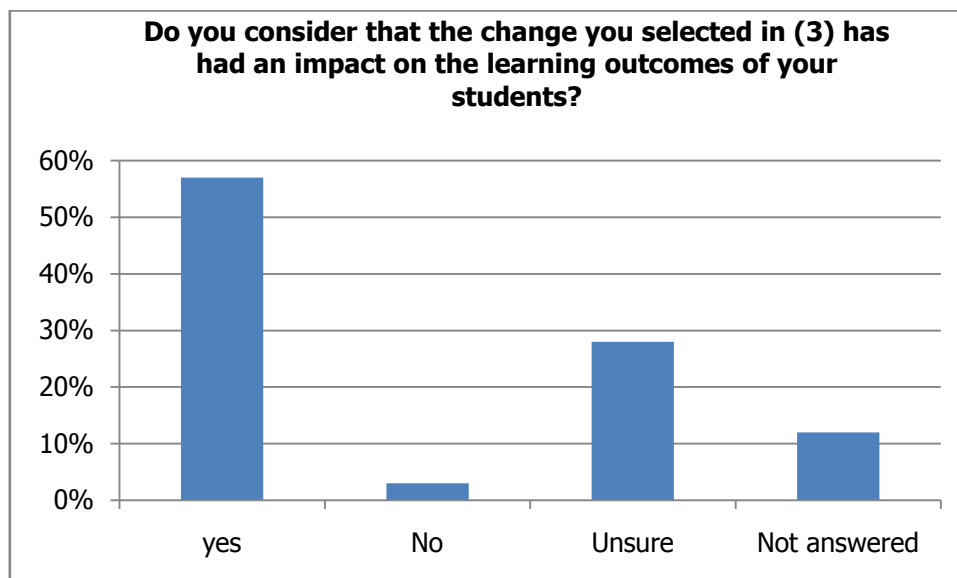
- *Helped me to interpret things such as 'a substantial amount'; given feedback on what moderators expect*
- *It has increased the dialogue between myself and other practitioners, supported new practitioners, and been a forum for the airing and sometimes resolution or clarification of issues of curriculum, practice and surrounding social content of teachers and students in the moment of their arising – all invaluable*

to the very specific, for example:

- *I was alerted to an application for a study award to go to Korea with Asia NZ sponsoring. I applied and won it brilliant 3 weeks in Korea very hands-on – excellent!*
- *I've been teaching since 1979 and had never heard of TRCC. Went to Dunedin great conference. Also found out about Play it strange and their free ukuleles to selected schools scheme. We got 20 ukuleles – been well used this year.*

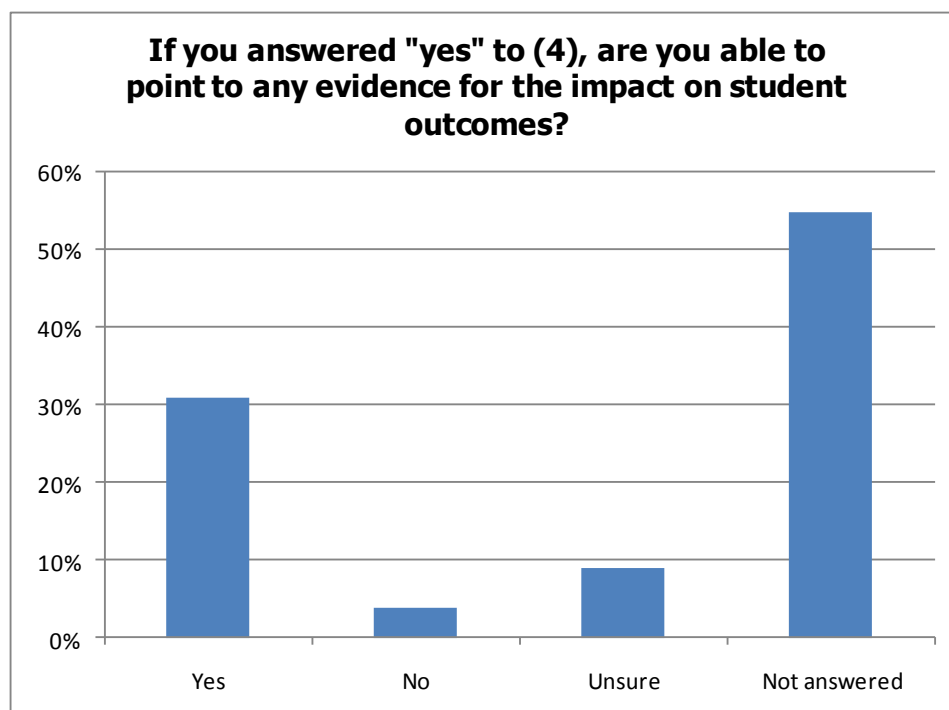
Graph 3 suggests that, whilst it is difficult to ascertain, there is a link between professional discussion online and student outcomes.

Graph 3



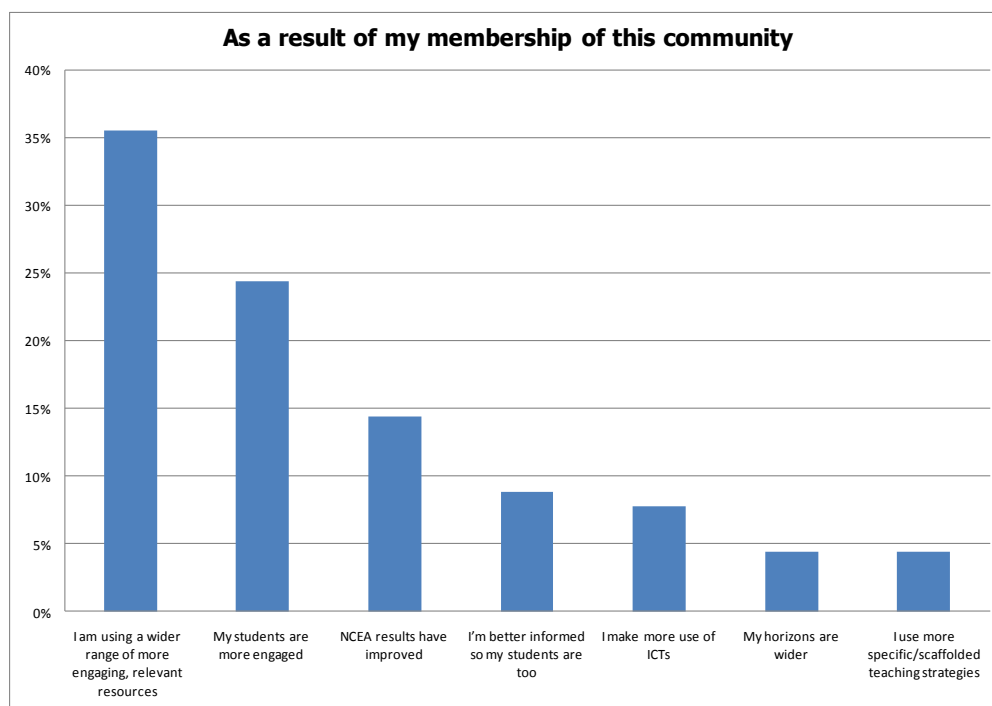
However, as shown in Graph 4, when asked to point to specific evidence of such an impact, fifty five percent of respondents did not answer and 9% were unsure. However, only 4% gave a definite "no".

Graph 4



The 31% who indicated that they were able to supply evidence of improved student outcomes pointed to the factors in Graph 5.

Graph 5



In addition, the following specific comments were made:

- *Literacy strategies used in class may have contributed to improvements in asTTle reading results.*
- *Noticeably more reading happening, more readers, and more of the readers reading more.*
- *Students all complete their homework as they can refer to my blog. As they have access at home parents are becoming more interested in what is happening within my classroom.*
- *The change was because I learnt about different teaching patterns for different learners – something I hadn't thought of before*
- *One specific piece of research led me to change the way I taught essay writing – students wrote more effective introductions as a result*
- *Clarification of information especially when it comes to the elusive moderation that is cryptic in its feedback*
- *Being able to cite research to alter the way curriculum is delivered leading onto better results*
- *My students have questioned me on why I teach in this way and I have been explicit about my process with them.*
- *Students receive more accurate feedback on their work during formal assessments.*
- *My students' end of year course evaluation comments suggested that they had benefited from the changes in the way I taught.*

Interviews with community members also tended to support the view that these communities did impact on practice. Having said that, 58% of interviewees rated the community they belonged to as 'average' in its support of their teaching practice. There were a number of possible reasons for a result which appeared less positive than suggested in other data, including:

- three of the respondents were not teachers and felt that only parts of the community and discussions were relevant to their role
- the change of contractor with oversight of one community led to decline in posts during the transitional period

- one of the moderators erroneously omitted this question from the interview schedule

However, importantly it needs to be recognised that online communities are just one of several ways that most teachers engage in professional learning.

Interviewees reported community support as increasing their confidence to make changes, especially if they were isolated. Fifty six percent felt that the online community was a 'reference point' as it provided dialogue and feedback which made up for the lack of support elsewhere. A common response was that the community provided 'reassurance', offered affirmation and the ability to keep up to date, which in turn allowed teachers to trial and implement new ideas. One respondent summarised this impact thus:

"often things that are mentioned, I will explore and adapt myself for the context. Rather than just doing what someone is saying they are doing. I think 'that's a good idea' and I take it and make it relevant to my context. The community is a spark that then ignites a fire but not the whole fire."

Thirty one percent reported difficulty in identifying impact on student learning. However, some participants (38%) felt that improvements in the resources they gave students in turn impacted positively on outcomes. This echoed the survey results.

Effective ISTE learning and practice are underpinned by inquiry and research evidence

Moderators reported that discussions underpinned by evidence were often powerful stimuli for participants. Such evidence, often contributed by the moderators, included examples, models and further references, often from official sources (such as NZQA policies, recently released research and Ministry policies).

Participant interviewees commented on the use of research and other evidence as a strategy the moderator used to encourage participation in the community. Providing coherence by organising information from a variety of sources was also commented on positively. One participant in extolling the approach of one moderator, said:

"You'll say something from the moderator's report, your posts are referenced to external bodies, it gives clarity to discussions. The discussion is focused on pedagogy, and I want discussion."

Another commented:

"as I look at the KLP model, leading learning and relationships are quite rightly at the core. Is this what leaders in schools have always been focused on? In reflecting on school leaders I have worked with in my time as a teacher, the teachers and leaders I remember fondly are those who were focused on student learning and established quality relationships. Does the KLP model give more emphasis to the how as opposed to the what?"

As a source of research evidence and resources, moderators used strategies such as "mining" other forums and online communities, acting as a filter and conduit from these to their own communities. Several saw this as a two-way process feeding material from their communities to other communities or alerting other communities to relevant threads emerging in their own community.

The indirect impact of online professional communities for professional learning was often commented on, for example, 25% of interviewees reported that their membership had led them to get involved in further professional learning activities, especially face-to-face events such as school meetings, visits and conferences. Some responses highlighted individual professional learning opportunities, for example, one participant commented that she was invited to an international conference as an expert speaker on a particular topic, based purely on the regularity of her posts on a forum on that topic.

At this point, it is useful to comment on the two distinct groups our data suggest are emerging within these communities. The first are relatively experienced teachers looking for professional extension. They appear less interested in friendly conversation or resource suggestions, seeking the more in-depth discussions that can take threads to a different level, for example:

"I get turned off by the nitpicky stuff. I understand that people need to ask these things but I just skip over them."

and another asked for:

"More of the question and answer, raising questions, starting threads that I have a professional leaning towards. Teachers often react on the forum, putting things up in response to problems, rather than being proactive, like a PD discussion."

The second distinct group appear to be less experienced teachers (or less experienced in a particular curriculum area or level). They often look for quick answers to specific closed questions ("Has anyone used this text before"? "Has anyone got an assignment for ...?"). Our data, including analysis of community archives, suggest that this group are clearly in the majority. To a large extent this accounts for the current pragmatic focus of online communities (and the modest amount of data we were able to gather related to this principle).

One moderator summarised her twin-tiered community thus:

"I imagine, that, for many, the breadth of instant ideas/suggestions in response to pleas for text titles, resources etc might be cited as a successful aspect, but, personally, I feel that the kinds of in-depth discussions that occasionally break out really provide genuine PD for the participants (and this includes lurkers)."

This obviously poses something of a dilemma for moderators which we return to in the Discussion section.

Effective ISTE learning and practice are developed through collaborative relationships

Collaboration and mutual support were seen by both moderators and participants as important in keeping participants engaged in the community, especially if the focus is on professional learning. Seventy five percent of interviewees felt that the ability to 'share ideas' was the biggest benefit of joining an online community. This was summed up by the following comment from a community member:

"I have appreciated the opportunity to read and learn and to be in a no threat participation role. I like the collegiality I have felt. There appears to be a very real level of trust and sharing".

Half of the interviewees felt that feedback from others was the most important advantage over other professional learning situations such as workshops. They felt that 'seeing' others' thoughts and ideas made belonging worthwhile and they felt supported, either directly or indirectly. Many valued the ability to gain feedback from a wider geographical spread and range of school types, for example:

"it gives a sense of being connected to teachers outside the college. Like, sometimes, you think, "it's ok, we're doing the right thing", and sometimes we read it and feel we could be doing things differently".

The most common moderator strategy to build community and collaboration was the use of nurturing comments such as thanking members for their contributions, for example:

"Hi...Good for you – thanks for contributing..." (Sent offline to an individual)

*"Good morning, I hope you are all enjoying your new insights into school leadership – special thanks to XX for turning their reflections into valuable resources for us all to use. Your spread of comment about what leadership is, relationships in schools, changes to projects, moral purpose, motivation to learn more etc etc successfully make for a rich reading session followed by further reflection. Thank you."
(Posted to a whole community)*

Moderators also tried to make participants feel part of a community by referring to their posts specifically, for example:

"Alan raised the important issue that is, I think, the elephant in the room – that of senior assessment being a validation of 'what's important'".

This same moderator tried to summarise and link the different points of the discussion to build a sense of community and shared purpose, for example:

"Chris, I think your comments relate well to the point made earlier in the week by Alison, when she mentioned that the thrust of the revised curriculum is on 'personalising learning'".

Many people are anxious about posting to an online community (especially for the first time) and this was acknowledged in moderator comments such as:

"Is there a brave soul out there who is willing to share a senior programme that they are hoping to revise for 2009?"

Indeed, some community members sent offline comments to the moderator to have them checked prior to publicly posting. As one participant said:

"There's something scary about having to put one's money where one's mouth is, so I've taken the easier path of sending these to you directly before sending them to the group, and if you think they would be useful to the group, and if you think I won't end up with egg on my face, then I'd be happy to have them put there..."

It also needs to be noted that, in providing advice, most moderators also felt that they were putting themselves on the line in terms of their own professional practice.

Effective ISTE learning and practice are influenced by and responsive to context and culture

There were two types of community in our project, one a web-based community in which members were required to post in a private space and the others were communities conducted in public via mailing list (listservs). There were clear differences between the more ephemeral listserv posts and the more permanent, structured, web-based forum posts. Posts to the latter were generally more reflective and carefully worded, longer (some being 200 words plus), specifically directed and much less frequent (even considering the size of the community). The moderator of the web-based forum noted that, even though this was a private community, there were clearly still barriers stopping members from posting, one being the relative formality of this particular community. One participant said:

"professional online communities are still not regarded by school leaders as places for spontaneous response and off-the-cuff expression of comment and opinion"

From the interview data, two major barriers to greater participation were highlighted. Fifty seven percent felt they had nothing to offer the discussion and 50% mentioned lack of time. When participants were asked what they thought would stop colleagues from joining or participating in the community, 38% mentioned both "time" and "not wanting an inbox full of emails" or "don't use email" as being barriers.

When members were asked what improvements they could suggest to encourage further engagement with the community, 25% suggested that they wanted clearer guidelines on how to effectively participate in an online community. In the case of listserv based communities, they were generally not referring to technical issues but to issues such as community focus and protocols.

Participants also commented on the potential usefulness of a 'map' to organise threads for future reference ('this is useful for ...'). This is only partially accomplished through automated archiving which is subject to the same fluidity as the discussions they are designed to record. One participant felt that the community could be overwhelming at times and that a 'filtering process' such as a map could be applied that could further highlight specific areas, rather than confronting members with everything at once.

Primaryartsnet was the least active community in this project due, we surmise, to the fact that primary teachers do not have the relative luxury of immersing themselves in a single curriculum area. The relative lack of interactivity in this community was not due to lack of moderator effort, as evidenced in this post:

"Primaryartsnet has been very quiet lately and I am keen to know whether you feel it is meeting your needs and to get any suggestions you have for improving it... if you could take a few minutes to consider some of the following questions it would be really helpful..."

One of the questions was "How can we promote discussion on issues of teaching and learning in the arts in primary schools?" This moderator initiated thread did result in several responses from teachers who shared thoughts and ideas around visual arts – but significantly, they also took the opportunity to meet together face-to-face as a result.

Effective ISTE learning and practice provide and build leadership in a range of contexts

The eclectic nature of an online community, comprising a range of people with different levels of experience and expertise (sometimes highly specialised, particularly in the arts) provides opportunities for leadership to grow.

With the exception of Primaryartsnet, all moderators found evidence of emerging community leadership, for example, in response to one moderator asking if someone could share material, a member responded:

"I'm curious about people's response to this. Are there others on this list who are explicitly working this way? Where this has been done before, what are the pitfalls? Could these ideas be further developed – is there something we're missing? Does anyone want to swap theme-based course outlines etc?"

Distributed leadership was encouraged through the sort of collaborative strategies already discussed but also through the use of "wait time" to enable other community members to respond before the moderator "jumps in".

Moderators walk the fine line between "official voice" and "member". One noted that her role "seems to work best as a voice of experience and reliability, but not as the sole source of advice or guidance". Seventy five percent of respondents in the interviews identified 'providing direction' as a clear strategy the moderator used. Obviously the nature of that direction is the critical aspect in either growing or thwarting distributed leadership.

Other strategies moderators used to build leadership included inviting others to participate (both on and off line), deliberately acknowledging contributions and finding out about and utilising the expertise within the community.

> Findings - In Summary

At the commencement of the project each moderator was asked to reflect on what they perceive to be their role as a moderator. In summary, most moderators perceived their role as:

- encouraging membership
- monitoring comments
- providing information
- answering questions
- contributing to discussion
- providing useful resources

Moderators initially viewed the most successful aspects of their communities as the sharing of resources and the willingness of participants to contribute.

They were again asked about their perception of their role towards the end of the project. At this point they felt that a more appropriate title for their role would be 'online facilitators' as opposed to 'moderators'. Their perceptions had changed significantly, for example:

"I am more focused on considering how to foster quality discussion. What starters are successful? How can I ensure the community is continuing to meet the needs of its participants?"

"The most challenging aspect so far has been trying to move beyond the closed question-type post (requests for resources, answers to assessment-based questions around moderation etc) to allow the forum to be a platform for pedagogical discussion."

"Sometimes, I'm never sure how much to get involved; I find there is a tension between needing to offer an 'official' line on something and wanting to be part of the discussion as a community participant rather than a moderator."

"I need to focus more on building shared understanding and not just conveying information"

Moderators strongly believed that their role could influence professional practice, especially because of their ability to share research about effective pedagogy. They identified a need to shift from just 'checking' to more awareness and involvement in the life of the community. Moving beyond the closed question-type post was seen as very important in order to allow the forum to cater for a wider range of participants and to build leadership.

One moderator stated:

"While there have been a number of key learnings for myself as a moderator, it is much harder, without further data gathering, to ascertain what the impact has been on teachers' own practice and on their students. Several participants commented on how useful they found the discussions but it is impossible, at this stage, to know if the thread discussions translated into practice.

The INSTEP project has however, allowed me to actively reflect on my role as moderator and, at times review and adjust my practice by analysing the evidence of the posts that appeared in response to my actions".

> Discussion

This section discusses the implications of the project findings within the context of the INSTEP principles. Some of these principles have greater relevance to online communities than others.

Effective ISTE learning and practice lead to improvements in teacher practice and student outcomes

Impact on Practice

Most teachers who belong to online communities appear to do so as a way of keeping up-to-date, of getting new ideas and resources and seeking support and guidance. Such use does not sit easily alongside a model of teaching as inquiry, with its implication of an ongoing, structured and cyclical intervention to improve student learning, along with reflection on the impact of that intervention. However, it is clear from the interview and survey data, that both moderators and teachers view membership of online communities as having a positive impact on practice. That positive impact is achieved by a combination of factors including:

- continual alerts to new resources and topics
- the input of both moderators and other community members into discussions which have salience to classroom teachers (eg the new curriculum, resources needed in the short term, NCEA). As noted in the findings section these 'everyday' topics can provide a springboard into more pedagogically focused discussion, especially where skilled moderators and community leaders have the knowledge and skills to enter and steer the discussion.

Catering for Community Diversity

Our data revealed two distinct groups within these communities. The first, a minority, are those teachers who are first and foremost experienced (and may be more experienced in online communities) who are looking for professional extension. They are less interested in social interaction or resource suggestions, seeking more in-depth discussion. The second group appear to be less experienced teachers (or less experienced in a particular curriculum area or level). They often look for quick answers to specific questions such as, "Has anyone used this text before?" "Has anyone got an assignment for ...?"

Both the moderators and community participants highlighted the importance of providing a clear purpose and framing for a community, without which moderators have little direction as to which way to 'steer the ship'. Defining that purpose whilst catering for such diversity is a challenge which needs consideration in the ongoing development of an online community. This can be done through the method discussed above i.e. using more "prosaic" topics as a way into more in-depth discussion. Another solution, which has been used by *Arts Online* communities, is to run short-term, online discussions focused on particular topics (for example, 'the place of the key competencies in the arts'), independently from the main community. While this does enable more in-depth and focused discussion for the more experienced group, the danger is that we may entrench a two-tier system in which the professionally rich get professionally richer, while those perhaps most in need of more pedagogically focused discussion continue to be exposed to a grab bag of quick fixes.

Based on our limited data, but also on our considerable experience of online communities, and in acknowledgement of the small number of potential members for *any* online community in New Zealand, we believe that retaining the strong generalist communities provides a way to cater for both groups providing the community is skilfully led and co-led. However there is obviously also a place for more focused, probably shorter-term sub-communities in which participants agree to engage in greater engagement with the discussion. These may well employ different sets of tools from that used to conduct the main community, depending upon the specific needs and focus. For example the *English and ICTs* community (another *English Online* community) gave rise to a successful *English and ICTs* blog.

Impact on Student Outcomes

As previously noted, evaluating the impact on student outcomes of participation in these online communities was beyond the scope of this project. However, there is some evidence to suggest, albeit tentatively, that the sharing via the communities of new and more engaging resources as well as innovative programme planning and teaching approaches, can and does have an impact of student learning outcomes. Certainly a significant minority of community members believe this to be the case and a very insignificant minority deny this. However, most are understandably unsure about such an impact.

Effective ISTE learning and practice are underpinned by inquiry and research evidence

Most of the online communities which were involved in this project are fluid, relatively anonymous, have multiple topics of focus at any one time and can only engage participants at a level at which they are willing to be engaged. A structured model of teacher inquiry cannot be conducted in such contexts. However, such communities do provide an appropriate forum in which teachers are able to share and discuss inquiries into their own practice and this appears to a natural and powerful function for online communities.

As well, such communities do provide a very accessible and seamless way to introduce teachers to, and conduct discussion around, recent research relevant to particular threads. However, simply inserting urls or files into online discussion will not necessarily engage participants or impact on practice. As mentioned, the key is the situating of such research in the day-to-day practice of teachers as revealed in their requests and posts. This involves adopting a 'just-in-case' rather than 'just-in-time' approach whereby moderators and other community leaders seize 'the professional learning moment' as an opportunity to prompt community discussion of approaches, endorse or challenge practice and draw attention to relevant research. The key, once again is in the professional confidence, breadth and depth of knowledge, access to research and professional networks of the moderator, a theme which recurs in this discussion.

Effective ISTE learning and practice are developed through collaborative relationships

Our data underscores the need to operate in online communities in similar ways as face-to-face communities. As can be seen from the moderator interviews, and as with the face-to-face world, friendly, inclusive language is important when trying to stimulate discussion. However, in a situation where practitioners are learning from practitioners how should a community deal with bad practice? If there is no challenge, there is unlikely to be any change in approach.

Moderation which encourages open, respectful dialogue includes non threatening questioning techniques and open-ended questioning. It also includes acknowledging the legitimacy of differing perspectives, the diverse levels of experience and expertise within a community and the existence of the many participants who choose not to participate. Skilful moderators model respectful dialogue, including how to affirm without condescension and how to challenge with professional respect.

Moderators help build a sense of community through making links between both topics and community members and through their ability to draw upon community history (and archives) to inform current discussion. None of this is possible without the excellent inter-personal skills we value in the real world, a genuine empathy with and knowledge of the community, including the history of the community online. All of this once again underscores the pivotal role of a skilful moderator to the success of these communities.

Effective ISTE learning and practice are influenced by and responsive to context and culture

Protocols for Users

Some participants, especially from the web-based community, requested clearer guidelines about how to effectively use their online community. It appeared that their concerns were mainly technical/operational. However, for all communities, there is a need to provide protocols to guide community participation and provide users with the confidence to participate. With this in mind, we have included as appendix 6, a model taken from the *World Wide Web in Education* (WWWEDU) community which includes some key considerations in developing such protocols.

Building Professional Confidence

Building member confidence is essential in encouraging contributions to an online community. Ensuring that the purpose of the community is clear and that protocols are in place to guide member interaction (as well as technical use) are obviously important in this. However, once again, our findings suggest that the actions of a skilled facilitator has the most impact on the confidence of members within a community, especially when he/she makes judicious use of the strategies outlined in appendix one.

The web-based community presented a special case. It was private, finite, more structured and formal and members had previously met each other personally. However, it appears that this was the most challenging in terms of ensuring participant engagement because of the perceived professional risk and judgement. Indeed, the moderator reported needing to use email as a prompt to participation. The moderator said:

"on looking back from the present, I think we underestimated the significance of participants feeling they were being judged by their peers and us – instead of seeing it as a learning process and adopting a 'give it a go' attitude."

The moderator reported that participants followed instructions about posting, but few departed from the suggested statements provided by him in order to provide guidance. He felt that participants were supportive of the initiative and wanted to make a good impression, but that there was a degree of trepidation about being online, in public. Some participants commented that a barrier was the 'the perception of being judged'. Some of the posts to this community were lengthy. This possibly indicates some rehearsal before any public posting which often resulted in more reflective, discursive posts. However, the difficulty of sustaining participation also highlights a dilemma inherent in more formal, structured online communities, due in this case to the apparently higher stakes of a more formal community of leaders but also perhaps to the choice of medium of communication (see below).

Collaborative Tools

Tools used for online collaboration need to be intuitive and easy for members and enable responsive moderation. There were differences in the perspectives of the members of communities which were conducted via email and the web-based community which may be due to the choice of collaborative tool, with the former apparently easier and more readily engaging for participants. The impact of the choice of platform was beyond the scope of this research but it is obviously a significant factor which would be worthy of further research.

Effective ISTE learning and practice provide and build leadership in a range of contexts

There are many layers of leadership in these online communities. They provide opportunities for new people to grow as leaders through supporting colleagues, regular posting and increasingly informed posting which can position them as an 'expert' in a particular area.

Most community members thought that a community was 'only as good as the people who belong' with several commenting on the strength in the concept of teachers helping teachers. On the other hand, it is clear that community members also appreciated having someone with high credibility and expertise in the role of the moderator to 'steer the ship'.

Moderator actions can certainly help grow leadership. These include delaying of their own responses to encourage responses from other members, the tone of those responses as well as on and offline encouragement of other community members to participate.

Given the focus throughout this discussion on the centrality of moderator expertise in an effective community, thought also needs to be given to their professional learning. As with the communities themselves, this is likely to be informal and collegial and could involve:

- their membership of related communities – both national and international
- their membership of other effective online curriculum focused communities within New Zealand as a model and a source of ideas and inspiration
- collaborative relationships between moderators themselves – as has occurred as a result of this INSTEP project.

> Further research

Online communities of practice have considerable potential in sustaining the work of the INSTEP project. This potential could be more fully realised through further research which focuses on:

- the impact on student outcomes of such communities
- the induction, training and support needed to develop effective online moderators
- the impact of the choice of communication tool on the effectiveness of online communities
- how to better cater for the needs of primary school teachers through online communities
- whether a critical mass of members is needed for an effective online community.

> Conclusion

Online communities of practice are likely to become an increasingly pivotal part of the suite of tools that educators use to keep themselves abreast of changes in their field, up-to-date with the views and practice of others working in similar areas and aware of new resources and approaches.

In this small-scale project we have highlighted the importance of skilled, professional and empathetic moderators in ensuring that such online communities meet the diverse needs of their members. We have also discussed the dilemma moderators face as they try to balance the need to address the deeply pragmatic, day-to-day concerns of busy educators against the ideal of leading discussion beyond the immediate to consider questions such as: "what is an effective pedagogy for this subject?"; "how should we best organise learning?"; "how do we ensure assessment supports learning?"; "how might particular resources be deployed to deepen learning and engage learners?"; "how will we know if changed practice is successful?"

Such questions are at the heart of the INSTEP project, indeed at the heart of the job of the educator and this project has shown that an online community of practice can be a critical tool in focusing on them as part of teacher professional learning, especially self-directed professional learning. It also suggests ways in which such tools can be deployed most effectively and it invites consideration of further research in the area, including into the nature of these tools. Most of all, it offers community leaders suggestions about practice which is likely to increase engagement and deepen the focus of online communities for teachers.

> Appendix one – Online community protocols aligned to INSTEP principles

INSTEP Principles	Effective ISTE learning and practice lead to improvements in teacher practice and student outcomes	Effective ISTE learning and practices are underpinned by inquiry and research evidence	Effective ISTE learning and practice are developed through collaborative relationships	Effective ISTE learning and practice are bound by the response to context and culture	Effective ISTE learning and practice provide and build leadership in a range of contexts
<p>Approaches from community leaders which support the principle in online COPs</p>	<p>Community leaders may:</p> <ul style="list-style-type: none"> ■ question/discuss with participants the rationale or evidence base for decisions about pedagogy or resources ■ question participants about identifying shifts in practice and what led to these shifts ■ use discussion about resources as a springboard into discussions about effective pedagogy to meet student learning needs ■ question participants about what led to shifts in student outcomes, with a focus on improvements for 	<p>Community leaders may:</p> <ul style="list-style-type: none"> ■ support, challenge and extend community beliefs and values through links to research and the use of questions and dilemmas ■ encourage community members to share examples of practice informed by research ■ put themselves on the line by asking advice about their own inquiry ■ steer members to other related online communities ■ use discussions as a context for highlighting sources of research and professional readings 	<p>Community leaders may:</p> <ul style="list-style-type: none"> ■ welcome and support new community members ■ model language that is affirming, friendly and topic focused ■ affirm previous contributions by linking these to current discussions ■ build a sense of community by specifically referring to participants' posts in discussion ■ use a variety of methods, including off-line networks and media, to encourage membership ■ acknowledge and foster the contribution of other emerging 	<p>Community leaders may:</p> <ul style="list-style-type: none"> ■ ensure the purpose is established at the initiation of the community and communicated to new members ■ provide a set of protocols at the outset guiding members about expectations; repeat, model and review those protocols on a regular basis ■ consider the most appropriate collaborative technology to meet community purposes and ensure ease of access and engagement ■ decide on when a thread has run its 	<p>Community leaders may:</p> <ul style="list-style-type: none"> ■ encourage the development of short or long term sub-communities to enable more specific foci to be explored ■ introduce a variety of collaborative tools to facilitate sub-communities ■ use offline communications and networks to encourage individuals to take increasing leadership ■ initiate and respond to requests and discussion in a timely manner or ■ practice 'wait-time' to enable others to provide leadership / responses

	<p>particular student groups or individuals</p> <ul style="list-style-type: none"> ■ prompt reflection on practice directly through questions or indirectly through the 'mirror' of others' best practice ■ share exemplary teaching materials and approaches ■ discuss the potential impact on student learning within pedagogical discussions 	<ul style="list-style-type: none"> ■ act as a filter or conduit to introduce current, relevant research and readings to the community 	<p>leaders in the community</p> <ul style="list-style-type: none"> ■ ensure that community-approved guidelines, protocols and 'netiquette' are adhered to by the community ■ encourage shared approaches and contributions from the wider community in response to problems or questions raised. ■ demonstrate leadership, humour and humility 	<p>natural course summarise the discussion; refer community to archives to support reflection and further action</p> <ul style="list-style-type: none"> ■ ensure discussion is archived for future reference ■ pre-moderate discussions to ensure irrelevant or erroneous posts do not appear ■ ensure list is kept 'ticking over' by minimizing moderation time ■ highlight emerging uses of technology related to the community focus ■ acknowledge and foster a range of perspectives and viewpoints 	<ul style="list-style-type: none"> ■ support leaders within their own communities as they transfer ideas from the online to the face-to-face community
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> **Appendix two – Moderator data gathering template**

**INSTEP – Online communities of practice project
Data gathering and collation**

Online teacher educator	
Online community	
Inquiry focus area	

Strategies/interventions used by the educator (eg what you did/said to encourage, support, initiate discussion)	Alignment with draft protocols (eg refer to the protocol sheet and identify which section this particular intervention may sit)	Evidence to support focus area from online community (eg copied posts/threads, discussions, initiation of inquiry focus and supporting material such as resources etc)	Evaluation/consideration/analysis of impact (eg nature of member’s discourse, impact number of posts/threads, any changes in community, comment from moderator/educator etc)

> Appendix three – Interview schedules

Data Collection – Online community participation INSTEP – Consolidation Phase Project

Note to interviewers:

- The points in the tables are for your notes only. Please do not ask the participants to choose from the options. They are there purely for you to tick if this particular option is mentioned by the teacher to save time or to be used as prompts if necessary. We have included space for extra notes about that particular point if required.
- An ethics paragraph is at the bottom of the survey if participants are concerned with what happens to the information they give.

Introduction

This survey is intended to find out about your participation in an online community. The questions are intended to find out about any impact your participation in the community has had on your teaching practice and on your students' learning.

Section 1 – General information

Respondent name (optional)		
Member of... (name of community)		
Description of participation in community. Would you describe yourself as an:	<input type="checkbox"/> active participant (consistently contributes to discussion) <input type="checkbox"/> occasional participant (occasionally contributes to discussion)	<input type="checkbox"/> frequent lurker (consistent user, reads discussion but does not post) <input type="checkbox"/> infrequent lurker (inconsistent user, reads posts infrequently)
How long have you been involved in the community?		
What has been the main purpose(s) of your participation in the community?		
Do you belong to other online communities. Their names...?		

1. How would you rate this online community in its support of your teaching practice?

Poor	Average	Good	Excellent
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. What aspects does this online learning community provide that other professional learning situations might not?

3. What topic/thread(s) or discussion have you found particularly interesting, stimulating or useful?

Section two

- Effective ISTE learning and practice lead to improvements in teacher practice and student outcomes.
- Effective ISTE learning and practices are underpinned by inquiry and research evidence.
- Effective ISTE learning and practice are developed through collaborative relationships.
- Effective ISTE learning by practice are responsive to context and culture.
- Effective ISTE learning and practice provides and builds leadership in a range of contexts.

This area is intended to find out about how you are utilising an online community to improve your practice and your students' outcomes.

4. How has your participation in this online community enabled you to improve or implement changes in your own teaching practice? Are you able to point to a specific example?

5. Thinking about the example you mentioned in (1), have you any evidence of an improvement in student outcomes resulting from the change/s you have made in your teacher practice?

6. What benefits do you see from being part of an online community?

Guide notes	✓	Further comments
Ability to seek and share resources		
Increased communication – school and community wide – not sure what this means in the context of national communities		
Updating of staff and/or keeping myself updated?		
Efficiency/time saving		
Increase in interest/motivation of staff (not sure why refer to staff rather than the individual being questioned?)		
Involvement in a variety of initiatives		
New teaching ideas		
Collaboration with professional colleagues		
Confidence? In?		
Collegiality		
Connectivity		

7. What do you see are the barriers to your greater participation in this online community?

8. What do you think may stop colleagues from joining or participating in this community?

9. Can you identify some strategies that the online community moderator uses to encourage participation in this community?

10. What improvements could you suggest that might make you engage further with this online community?

11. Have you engaged with other professional learning activities as a result of your involvement in the online community? If so, please list.

Please give a rating for the overall impact of the professional usefulness of the community

Very limited impact	Limited	Fair	Wide	Very wide	Extensive impact
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Any other comments

Thank you for participating in the interview. We appreciate your time.

Note: All interview responses will be collated and reported on anonymously. Information about you or your school will not be included in any reports that result from the evaluation. If you have any concerns over the way this interview was conducted, please feel free to contact Phil Coogan at Cognition Consulting (Level 1, Pfizer House, 14 Normanby Road, Mt Eden, Auckland, Phone 09 638 4821; email pcoogan@cognition.co.nz).

Data Collection – Online community moderation INSTEP – Consolidation Phase Project

Introduction

This survey is intended to find out about your participation and moderation in an online community. The questions are intended to find out about any impact your participation in the community has had on your moderation practice.

Data collection – online community moderation

Section 1 – General information

Respondent name (optional)		
Moderator of... (name of community)		
Description of participation in community	<input type="checkbox"/> Active moderator (consistently contributes to discussion) <input type="checkbox"/> Occasional moderator (occasionally contributes to discussion)	<input type="checkbox"/> Infrequent moderator (consistent user, reads discussion but does not post often preferring others to do this)

How long have you been moderating the community?	
What do you see is the main purpose of this community?	

1. How would you rate the online community you moderate in supporting teaching practice?

Poor	Average	Good	Excellent
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. What types of support does this community provide for teachers that other situations/sources of support might not?

3. In your view, what has been the most successful aspects of this community?

Section two

- Effective ISTE learning and practice lead to improvements in teacher practice and student outcomes.
- Effective ISTE learning and practices are underpinned by inquiry and research evidence.
- Effective ISTE learning and practice are developed through collaborative relationships.
- Effective ISTE learning by practice are responsive to context and culture.
- Effective ISTE learning and practice provides and builds leadership in a range of contexts.

4. In your opinion, what makes an effective online community?

5. Could online communities become an authentic professional learning situation that impacts on student outcomes? What would it take to achieve this?

6. What are the essentials when facilitating a community?

7. What other comments would you make about the community you moderate or online communities in general?

Please give a rating for the overall impact of the professional usefulness of the community

Very limited impact	Limited	Fair	Wide	Very wide	Extensive impact
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Any other comments

Thank you for participating in the interview. We appreciate your time.

Note: All interview responses will be collated and reported on anonymously. Information about you or your school will not be included in any reports that result from the evaluation. If you have any concerns over the way this interview was conducted please feel free to contact Phil Coogan Cognition Consulting (Level 1 Pfizer House, 14 Normanby Road, Mt Eden, Auckland, Phone 09 6384821; email pcoogan@cognitionconsulting.co.nz).

> Appendix four – Online survey questions

1. Has your membership of this community changed your classroom practice? (Options: yes/no)
2. If you answered “no” to question 1, are you able to say why belonging to the community has had no impact? (Option: Open text)
3. If you answered “yes” to question 1, in what ways has your membership of this community impacted on your practice? (Options: drop down menu with:
 - Informed me about different teaching approaches
 - Alerted me to new resources
 - Alerted me to new topics and perspectives
 - Other – please elaborate (Open Text)
4. Do you consider that the option you selected in (3) has had an impact on student learning outcomes? (Options: yes/no/unsure)
5. If you answered “yes” to (4), are you able to point to any evidence for the impact on student outcomes? (Options: Yes – then Open Text; No, Unsure)

> Appendix five – Ethics note for community participants

Instep Project – Online communities of practice

The INSTEP project is a Ministry of Education research and development project on the learning and practice of inservice teacher educators (ISTEs). It has three key objectives:

- To explore and develop effective approaches for the professional learning of inservice teacher educators;
- To strengthen and promote evidence-based inservice teacher education practice;
- To support professional leadership and ongoing improvement within the inservice teacher education sector.

Cognition Consulting Ltd is part of this project which we hope will build more effective online communities of practice. We are focusing on the work of online moderators and will be gathering information and taking samples from the archive of posts to *Arts Online*, *Social Sciences Online* listservs and the Principals' Electronic Network online community. We hope that this study will help us evaluate and improve our practice within these communities.

Later in 2008, we may approach members of this community to be interviewed about their participation and we hope you will be keen to be part of it.

All samples used in this project will be anonymous and any identifiers within them will be removed.

If you have any concerns or questions about this project, please contact Tracy Bowker on tbowker@cognitionconsulting.co.nz or 04 3820307.

Thank you

> Appendix six – World Wide Web in Education: Frequently Asked Questions

1.1 *What is WWWEDU?*

WWWEDU (The World Wide Web in Education List) is moderated list coordinated by [Andy Carvin](#) at the [Benton Foundation](#). The purpose of WWWEDU is to offer educators, students, webmasters, policy makers, parents, and Internet users in general a continuous discussion on the role of World Wide Web use in education. The Web is an ideal environment for teaching students of all ages. A well-conceived Web site can inspire creativity and interactivity, yet it is still too new of an environment for us to completely grasp its potential. What are teachers and students doing with the Web today? How can the structure of the Web positively affect learning and assessment? What else can be done to expand the Web's role in education? And how can we encourage non-Web using schools and educators to take advantage of this new tool? WWWEDU will hopefully provide a forum for these questions and others as they come up.

WWWEDU is targeted for use by educators, students, parents and webmasters, but anyone with a keen interest in the use of the Web in education is welcome to join. Discussion is moderated, but anyone may jump in at any time to begin a new topic. Standard netiquette and courtesy apply at all times, and flaming will not be tolerated.

WWWEDU's home page can be found at <http://www.edwebproject.org/wwwedu.html>.

1.2 *What are the guidelines for posting WWWEDU?*

Because WWWEDU is a moderated group, all posts that are submitted to the list must be approved by Andy Carvin before they can be distributed to the entire subscribership. All posts must be in plain text (sometimes called **ascii** text), in order for all members of the list to be able to read them. Never post an attachment or anything coded in HTML, for these messages will seriously mess up digests of the list. If you're going to post to the list, be sure to check that your email software is set up to send messages as plain text or ascii rather than HTML or MIME-encoded. If necessary, make the change in your software's preferences before you post a message.

In general, the following subjects (and any related issues) are considered fair game:

- The use of the web in education
- Expanding web access and publishing into the classroom
- Announcements of free educational web resources
- Promotion of easy access to the web for all levels of education
- Educational web site reviews
- Educational interactivity in web environments (MOO's, chat rooms, etc.)
- Politics and policies that may affect web use in education
- Web-related grants, projects, contests, and other opportunities
- ancillary web issues such as Acceptable Use Policies, student-teacher publishing rights, etc.

In contrast, the following subjects are considered inappropriate and may be rejected for publication:

- General questions on education
- General questions on non-Internet media technologies (CD-ROMS, video, etc)

- Private posts to members of the group
- For-profit advertisements of any type whatsoever
- Requests for Greetings (such as "please send a message to my class and tell them where you are!")
- Administrative questions (post these directly to acarvin@benton.org)
- Computer virus warnings (see below)

Most of the above examples are straightforward, but I'd like to explain the virus warning ban. Every now and then you may receive an email from someone warning you about some new computer virus, encouraging you to spread the word. In 99.9% of all cases, these messages are hoaxes. The virus itself doesn't exist; rather, the hundreds of thousands of emails generated by people spreading the word about it is the actual virus, taking up precious Internet bandwidth. If you are determined to post a warning, though, please check the Virus Warning website at <http://www.kumite.com/myths> to confirm or debunk the virus' existence.

Sometimes, the occasional off-topic message will be allowed if the subject is clearly of interest to the WWWEDU community. But in general, the reason for disallowing these subjects is simply that there are often more appropriate forums for them elsewhere on the Net, and because the vast majority of WWWEDU subscribers subscribe to more than one discussion list, they would be bombarded with redundancies. For example, if you have a general question related to technology policy, I would highly recommend you post it to the EDTECH list at edtech@h-net.msu.edu. For a comprehensive list of other educational/technology lists, please visit <http://www.edwebproject.org/lists.html>.

As for the rule for not allowing "requests for greetings," invariably they clog up the discussion because people will cc-post their responses to the group, and not directly to the original person. As noted before, flaming, rudeness and commercial advertisements will not be tolerated. If you are unable to follow these rules, you will be removed from the list.

When posting a message to the list, be sure to consider the following:

Write clear and meaningful titles. If you're going to post an email to the list, the title of your message should be clear enough to convey the purpose of that message. For example, if I have a question regarding elementary school students accessing the Web, I shouldn't title the message as "Question" or "Help." A much clearer title would be something like "Web Access in K-6?" or "Using the Web in Elementary." Or, if you're going to post your first message to the list, you might want to say "Introduction: Bill Gates," assuming your name was Bill Gates, of course. Clear message titles are important because many WWWEDU subscribers received hundreds of emails a day, so if you want to be sure your message gets a close look, your title should be clear and should stand out.

Don't post huge messages. You should always say what you want to say, but don't post messages that drag on for pages unless you've got a really good reason for it. Long messages are slower to process and can cause bottlenecks in the listserv. So if you want to announce that you've got a call for registration for a conference, post a summary and let us know how to get a copy of it, instead of posting the entire conference program.

Responding to another message: private vs. public posting. Ideally, when a person posts a message to the list, we all like to see responses posted as well, assuming the original poster hasn't requested that the responses be private. When you respond to a message, the mailing list system is set up in such a way that your response will go

automatically back to WWWEDU and not the original author - please be aware of that when you compose your message. And whenever possible, trim the size of the original message - there's no reason to repost the entire original, since we've all seen it before. Instead, include the highlights and key points to which you're responding. And NEVER respond with an entire daily digest of messages tacked to the bottom of the message - emails that large will never be posted due to size constraints. There's also no need to respond with a post that says "Yes, I agree," or "me too" and nothing else. If you're going to post a message, make sure that message is adding to the conversation. :-)

Sign your messages! All posts to WWWEDU must be signed with your name and email address, and preferably your location and what you do. Be sure to say exactly where you are - for example, if I signed my messages Andy Carvin, Cook Middle School, no one will be able to tell if I'm in Arkansas, Australia or anywhere else. Anonymous postings to lists in general is considered rather impolite and won't be posted. Besides, it can make it very difficult for people to respond to you privately.

Posting regular project updates. If you're like me and you like to post updates about your particular website or project on a regular basis, don't bombard us with an overabundance of messages. If your site is dynamic enough to merit a posted update ever week or two, than feel free to do it. But if you want to post a message every week just to reannounce your site, even if there aren't substantial changes to the site, please hold off and wait till there's something new to announce. **Never post attachments of any kind!** Attachments are the scourge of listservs everywhere because they can't be processed by every email reader. While it may seem nice to attach a picture, a business card or a Word file to your messages sometimes, this means that hundreds of subscribers will get your attachment as pages of garbage data. Under no circumstances can attachments be posted to the list.

1.3 What does WWWEDU have to do with The EdWeb Project?

The relationship between [EdWeb](#) and WWWEDU is a bit nebulous. Both are maintained by [Andy Carvin](#), and the WWWEDU home page is hosted on EdWeb. Beyond that, they tend to follow different paths. EdWeb focuses strictly on K-12 education, reform, and telecommunications policy, and all of the content is written and/or edited by Andy. WWWEDU, on the other hand, does not focus specifically on K-12 (though it is certainly an important component of it). Discussion spans all aspects of education, from kindergarten to adult learning, and is tied together by their involvement on the World Wide Web.

1.4 Who the heck is Andy Carvin anyway?

[Andy Carvin](#) (acarvin@benton.org, 202-454-5627), moderator of WWWEDU, is Senior Associate for the [Benton Foundation](#) in Washington DC. Andy is the editor of the Digital Divide Network (<http://www.DigitalDivideNetwork.org>), a national coalition of high tech corporations and non-profit foundations working to find solutions to the digital divide. Andy and his writings have appeared in numerous publications, including the New York Times, Harvard Educational Review, Education Week, the Washington Post, Rolling Stone, the Village Voice, Esther Dyson's Release 1.0, Web Review, and the second edition of The Internet Unleashed, published by Sams/MacMillan.

Andy was named in 1999 by eSchoolNews magazine as a member of the Impact 30, an annual list highlighting 30 of the most influential people in education technology today. He is a member of the Board of Directors for the Asia/Pacific Center for Justice and Peace, a consortium of NGOs that promotes democracy, free speech and freedom of religion across

Asia. He also serves on the Board of the Consortium for School Networking (CoSN), which advocates policies regarding the role of information technology in schools. He previously served as New Media Program Officer for the Corporation for Public Broadcasting, where he developed Internet-related grant programs for the public broadcasting community.

Andy holds a bachelor of science in rhetoric and religion and a master of arts in telecommunications from Northwestern University, where he received the prestigious Annenberg/Washington Graduate Fellowship. While living in Illinois, he was co-founder and editor-in-chief of the Chicago area arts weekly, Art+Performance magazine. In his free time, Andy has traveled extensively around the world and has written about his adventures in popular online travelogues. In January 1999, Andy premiered From Sideshow to Genocide: Stories of the Cambodian Holocaust (<http://www.edwebproject.org/sideshow>), a historical collection of accounts from survivors of the Khmer Rouge regime. Most recently Andy published Anatolian Fortnight (<http://www.edwebproject.org/anatolia>), detailing his September 1999 trip from Istanbul to Mount Ararat.

1.5 How do I subscribe to WWWEDU?

To join WWWEDU, send a message to wwwedu-subscribe@yahoogroups.com. You will then be added to the WWWEDU list.

When you first join WWWEDU, please post an introduction of yourself to the group, and feel free to suggest any discussion topics. You may post at any time by sending a message to wwwedu@yahoogroups.com.

1.6 Is a daily digest available?

Because WWWEDU can be a high-volume list at times, you can elect to receive the its postings in one large chunk each day. This is the best way to avoid information overload for many people, but it can also slow down one's involvement in the discussion. To receive the digest, visit the WWWEDU list management site at <http://groups.yahoo.com/group/wwwedu> and click on the "edit my membership" button on the right-hand side. Here you'll be able to switch your membership setting to digest format. If you ever need to switch it back, return to this same page and you'll be able to re-adjust your settings.

1.7 How do I unsubscribe from WWWEDU?

To unsubscribe, send a message to wwwedu-unsubscribe@yahoogroups.com. You'll then be removed from the list. If you experience any problems with the list, please contact [Andy Carvin](mailto:acarvin@benton.org) directly at acarvin@benton.org, and no matter what, DO NOT post unsubscribe requests to the entire list.

1.8 Where is the WWWEDU archive, and is it searchable?

You can access a hypermail archive of all posts from June of 1995 to the present at <http://majordomo.wested.org/hyper-discussions/wwwedu>. Messages are archived in year-by-year folders.

If you want to perform a search of the entire archive, visit <http://majordomo.wested.org/hyper-discussions/wwwedu.html>. Both the archive and the search engine can also be accessed through the WWWEDU homepage at <http://www.edwebproject.org/wwwedu.archive.html>.