BUILDING THE VECO ONLINE COMMUNITY - A MODEL FOR ENCOURAGING NOVICES

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INTRODUCTION

Building online networks and designing network activity is becoming central to how educators and other education-based professionals work, train others and teach students. It is only since 1995 that Internet connectivity in Australia has provided the critical mass and momentum which alters how people work, who they work with and how they learn. Thus the business of helping professional networks develop and become part of the lives of their members is uncharted territory and an area for research and development for educators in all fields. This paper shares the story of the development of an Australian Network for Vocational Education Coordinators, who were learning to use an Online professional community (VECO) as part of their working patterns. This paper describes the findings from monitoring the first two years of activity where participants shared reflection of the impact of VECO, and researchers identified the design elements for online networks and online activity which can be applied to building educational networks for training, professional development and professional community.

Vocational Education Coordinators are the key liaison people in the school-industry partnerships which enable students to participate in vocational education programs involving structured workplace learning. Because they are often the only person in their role at a site or within a school cluster, their work can be an isolating experience. Yet connectivity to information and expertise is essential to knowing about funding opportunities, new political agendas and industry demands, and ensuring students in a school have the best opportunities. It seems obvious now because of their role and working style, that this community of professionals would have adapted well to working online but this could not be assumed when the VECO project began.

The Vocational Education Coordinators Online Project (VECO) was established as an initiative of the Australian Student Traineeship Foundation (ASTF), an independent Government-funded agency charged with introducing quality school-industry programs in Australian Senior Secondary schools, in partnership with Aussie SchoolHouse (ASH), a non profit association helping teachers make educational sense of the Internet. The VECO project was developed to help coordinators across the country use the Internet to access information, share strategies and programs, and learn about the new ways industry are making use of online connectivity. The design of core elements of the VECO project was drawn from the experiences of the Aussie SchoolHouse team who had been instrumental in establishing online communities for teachers (Refer to oz-TeacherNet and Aussie SchoolHouse web sites for this story.). VECO thus emerged with a set of core beliefs, assumptions and initial plans. It had always been the intention of ASH and ASTF to collect data throughout the first two years. This would enable the team to test their assumptions and expectations and to reflect on the impact and success or otherwise of the VECO project, knowing that the changing dynamics of Internet connectivity meant the world that VECO was mimicking, was maturing also.

BUILDING VECO

The online community metaphor was a powerful structure from which VECO was developed (Williams and McKeown, 1996). The vision was to create a large self-sustaining online community of coordinators and others who would gradually immerse themselves in conversations and projects. It was imagined that people in the community would help each other, seek information and ideas when they needed and initiate activities. It was decided from the outset to use an e-mail list as the device to provoke conversation and that other Internet tools might be used once a critical mass of people had become regular contributors. The oz-
TeacherNet program provided the infrastructure of lists, list archiving and management systems and provided a supporting network for community-builders.

It was assumed that means and motive would not be a logistical barrier to participation. It was believed that many vocational education coordinators would be computer users and they also had access to an office with a phone and needed only to add a modem to their existing computer system. Perhaps they might have needed to call on local expertise in their workplace to establish connections. It was also predicted that these people would want to connect knowing that access to timely information was essential to their work, and because they wanted more support from peers working in other locations. They are highly motivated people whose work environment requires they approach and solve problems without fuss, began using the VECO system for work purposes quickly.

To develop the project, a coordinator was sought. Her initial role was to encourage vocational educators to join in and to help them learn about participation in online communities. The ongoing role would be to welcome newcomers, provide advice and help, promote public dialogue and be the identifiable name and personality to which people could relate. Research about the role of online mentors (Berge, 1997a; Berge, 1997b) created the basis of such a role description.

Her plan was to develop some face-to-face and online events as the professional development strategies for nurturing a vibrant community. It was imagined that this role would not be required once the community reached a critical mass of regular self-motivated contributors. Such a prediction was supported by researchers whose analysis of online groups indicated three conditions were sufficient to sustain communities: place, purpose, and people and that self-regulation was a key attribute of vibrant online communities (Harasim, 1990).

In comparison, some in-depth case studies of Queensland teachers by Queensland University of Technology (QUT), informed the VECO project team that educators may need to be intensely nurtured before they might participate and that beginners were somewhat reluctant to ‘talk’ to people they did not know (Williams, 1995). The research had clearly demonstrated that people responded to personal nurturing and that from time to time, they needed advice and help to participate more effectively. The research also provided a model for online events and strategies that seemed to provoke dialogue and a sense of community. Therefore it was concluded that an online coordinator was an important structure in the project.

The QUT research had also informed an Education Queensland program of professional development for novice computer-using teachers. The Connecting Teachers to the Future model involved a 10 day workshop where participants learned not only how to use equipment, but how to participate in online communities. This workshop was followed by participation through an online community, where these teachers are gradually encouraged to join into the various teacher communities and curriculum activity that occurs online (Williams, 1996). The Connecting Teachers workshop model was applied to the initial VECO workshops, expecting that the relationships developed face-to-face would contribute to online relationships.

The VECO workshops were much shorter and began from a more sophisticated place than the Connecting Teachers program. They assumed that coordinators attending workshops were connected, had joined the voced-coord e-mail list and had established some contact via e-mail with the project coordinator. By insisting on these prerequisites, people attended with some degree of familiarity of VECO. The workshops could then focus on community building habits and attitudes and help people gain knowledge and skills to participate more effectively. These workshops were conducted around the country with groups of 12-15 people and continued to be a major strategy for helping support newcomers to this growing community into the second year.

Supporting people after the workshops and supporting those growing numbers of people who joined without attending the workshops, became a significant issue. Theory and practice helped inform the design of this online community. In their research into communities’ practice in a range of professions, Lave and Wenger (1991) developed theories of legitimate peripheral participation to explain how newcomers to a profession learn to participate and what role existing community members play in supporting newcomers. The research revealed
that the 'talk' within lexicon of the community could characterise a group and identify how to participate. They claim that ability to participate in the dialogue of the community of practice was a process to be learned and treasured and that the community had a culture that determined how, when and if that dialogue was central to participation in the profession. Their research also drew out the roles that facilitators or teachers in a community would play and what events might encourage the community to mature while involving new members.

In the design of VECO, it was predicted that there would be tension between wanting to nurture and shape a community and enabling it to develop naturally. Thus the role of the VECO coordinator could be problematic. Lave and Wenger (1991) encouraged a facilitation role. 'Mastery resides not in the master but in organising the community of practice of which the master is part' (p.94). Reil (1990) extended this by saying that cooperative community which emerges on global networks can only happen if all participants are involved in its construction; an outcome more likely to occur when the manager or teacher takes a less dominant role. Others suggest that posing questions rather than providing answers can facilitate online dialogue and that deflecting questions to the online group may be a part of the process to change the culture from leader-centred to participatory (Davie and Wells, 1991; Rheingold, 1997a; Rheingold, 1997b). Thus, the tenuous balance between nurturing people, developing community and providing quality online experiences began.

**ONLINE STRATEGIES**

The VECO community began by using as an e-mail list and has since matured to inhabit a space where a number of Internet tools support online events and general dialogue. The ASH team and the coordinator have developed a number of strategies to host dialogue including online guests, online debates and general calls for participation in decisions about VECO management and development. An extensive web site has been developed to capture the wisdom of the community, enable participation at workshops and in online training, and explore synchronous technologies for hosting live events and conversations.

The e-mail list began its life in the now traditional way of inviting introductions from newcomers and encouraging people to share what they wanted to do online. Apart from welcome messages, much of the early discussion was a result of follow up activities from workshops and discussion of the development of a participatory web and design of online events. The coordinator naturally took a strong role in invoking conversation. Such moves were always in the context of obtaining feedback, and gently nurturing new kinds of conversations as well as modelling various modes of online behaviour. Naturally as the community learned how to participate, questions and requests formed a large part of the daily traffic. Wherever practical, the coordinator left the community to respond, thus facilitating the self-help nature characteristic of online communities. Apparently unanswered questions were often followed up by private e-mail providing substantial evidence that there was much more going on privately than publicly. Participants were encouraged to feed summaries of responses to requests back to the community so that the give and take nature of communities was more obvious.

In August 1997, a series of online guests was initiated to provide professional development events for participants to experience. Guests were chosen who could help coordinators manage their tasks, be informed of new trends and developments and who might challenge the assumptions behind vocational education programs in schools. The voced-coord list was used to host each guest. After being formally introduced, guests presented some ideas and invited dialogue from the community. The e-mail-based dialogue was conducted over a two-three week period until the facilitator closed the event. A number of variations of the core model have been tried and events have been captured and published on the VECO web site. Online guests have provided a focus for dialogue in the community and altered the path of conversations that might have emerged in a less structured model. Early data suggests that guests have not only developed the culture of the community but also caused substantial shifts in the online habits of participants and contributed to their understanding of the educational and professional potential of the medium.

More recently VECO has begun to explore the use of synchronous technologies to host events. The development of the VECO Café, a web-
based chat facility, has added to the ways these coordinators participate in their community of practice. As well as hosting traditional live chats on a topic, the café has been used to troubleshoot problems, plan events, discuss shared writing tasks and enable people not attending a face-to-face event to attend virtually and interact with speakers and the audience. To complement this model for distributed participation, the ASH team has begun exploring Real Audio applications to broadcast events live to the VECO web and to store previous events. The project is becoming a leader in development of strategies to enable participation by scattered people.

The VECO web site records the development and activity in the community. Based on community-centred principles, the web site encourages participation, provides tools for face-to-face and online professional development, contains a number of databases which participants maintain and use and records the common knowledge the community has offered and agreed to record. It is built for and by the community who use it, and although tourists are welcome, it is not intended to be the electronic postcard in the sky which so often characterises institutional webs.

TESTING THE ASSUMPTIONS

A considerable amount of data has been collected throughout the VECO project, much of which is available online. The voiced-coord list has been archived and is available publicly. The VECO coordinator has kept meticulous records and kept archives of her e-mail. The web site records special events and comments from users. Following each VECO workshop, survey data records the impact of the workshop ideas on what people do online and follow up surveys have been conducted each year to determine patterns of behaviour for members of the community. The VECO coordinator participates in a data gathering exercise each six months and conversations are taped for later analysis. Considerable web site status and usage statistics are processed and kept.

Such data is sifted regularly by the coordinator and reported in internal documentation to ASTF, Aussie SchoolHouse and the VECO team. Further, interview data and recorded team discussions are used regularly to reflect on previous progress and develop future trends. Web site data is used to substantiate trends which emerge from e-mail and interview data. Profiles of the community, typical users and overall trends have been developed and are used in the development of literature contributions and conference presentations (Bowes, 1998a; Bowes, 1998b; Bowes 1998c).

BUILDING COMMUNITY

An initial key objective of the project was to create a sense of community for participants. A number of strategies have been undertaken each with the purpose of creating a sense of participation and belonging. The data reveals that while some people actively participate in all online events, many tune into selected events when it fits within their schedules. The result of this process is that people build different metaphors for VECO, dependent on their experiences. Catherine, a regular contributor to VECO since her first posting the voiced-coord list in April 1997, offers this metaphor.

VECO is like my staffroom. There are lots of coordinators who are in schools who do not have a lot of others to talk to about their job. VECO fills a big gap for me here.

Others described it as a 'learning community', or a 'vehicle in which to learn about how to do the job'. Others saw its strength in drawing together isolated workers and its importance in reducing the sense of isolation and in keeping up to date with developments outside of their school.

The network metaphor is a common theme which emerges from survey data and mail archives. The networking between people who work in a similar field means information shared is relevant to the audience and seen as professional development.

I have found just by reading VECO articles that VECO is a really powerful and effective professional development and networking tool. It's definitely helped me learn far quicker than I could have imagined - thanks to all VECO subscribers.

Fiona, a contributor to voiced-coord.

The data collected to date suggests clearly that there is a sense of belonging for most people, but
that the feeling about participation has ebbed and flowed over time. On one hand, there is now a history of fondly remembered 'VECO Folklore' reminisced when people 'get together' virtually or face-to-face. There is also a clear identification with the VECO label, born out by conversations when people meet at the range of educational events that attract VECO members.

Oh, I know you from the VECO list. I read your messages.

Comment to an ASH team member at a teachers meeting.

On the other hand, others are more reluctant to join in and feel less involved and subsequently less like they belong. Our research indicated that newcomers and quiet lurkers to the community express different levels of commitment. For some, commitment to the community only emerged as the social dynamics took hold in some events. Like other places where day-by-day contact causes a type of etiquette and way of interacting and behaving, the VECO community has had to develop its own way of communicating and playing social roles. There have for example, been a number of 'emotive' exchanges from time to time as people's ideas were challenged. As Bowes, the coordinator, reflects:

_Sometimes, issues online explode into almost heated debate. Whatever your point of view at the time, these instances tend to remain in people's minds as part of the collective history of the community. An example of this in VECO's history is the Cappuccino debate where a serious discussion on assessment (led by an online guest) transformed into an amusing debate about competencies involved in making a cappuccino._

(Bowes, 1998a).

On VECO, cyber-personalities emerge and for some, this is quite an unexpected educational experience and one on which they reflect.

I found it of great benefit meeting some of the people I had corresponded with. I recall getting quite offended by the comments of one individual but when I met her face-to-face and put her comments in the context of her personality, it all made sense.

Catherine, VECO contributor.

The dialogue in this community of practice (Lave and Wenger, 1991) is mediated mostly by computer and for many individuals, the absence of visual and other cues accredited to 'personality', is quite a factor in how they understand their online colleagues and how they attribute characteristics to them. Bayan (1995) suggests that flaming occurs simply because of the lack of knowing, the other person, in the sense of knowing that we build from our face-to-face relationships.

The interrelationship between face-to-face meetings, phone conversations, private and public e-mail then, is a significant factor in developing the VECO sense of community. Participants pointed out that they now try and attend VECO and other events to meet their online counterparts and that they now have more regular and more effective exchanges with their peers because of their online experiences. Such evidence leads the ASH team to conclude that strategies to develop relationships and enhance existing ones, are important building blocks for online community. The survey data suggest that the VECO workshops are a significant factor in helping people develop relationships they can continue online and that once participants have a cyber-relationship with people they have met, they learn to accept more easily, the possibility of developing cyber-relationships with people they have not met.

Interaction between VECO participants occurs 'off-the-list' through private e-mail. There is early evidence to suggests that private traffic far outweighs that seen on the voced-coord list (ASTF, 1998). Late in 1997 some preliminary analysis was undertaken to assess the value of the workshop program and this revealed that whilst the feedback immediately following the workshops had been overwhelmingly positive, only 20% of workshop participants showed active participation in public (identified by messages posted to the voced-coord e-mail list). A survey was then conducted to identify the longer-term implications of the VECO workshop program. The results revealed that when private activity was taken into account, the participation level rose to 80% of those surveyed. Whilst these exact figures cannot necessarily be extrapolated to the whole VECO membership, combined with the anecdotal evidence, it does suggest that what is visible publicly is only the tip of the iceberg.
Others have also reported that what happens on lists, is shared in the communities to which list participants belong (Wild, 1997). The oz-TeacherNet archive and correspondence to the oz-TeacherNet team, suggest that members are so influenced by their own experiences, that they use the lists messages to persuade peers to join in or to help support arguments they are making in their workplaces. The public archives and events of the community are then open to scrutiny in a range of audiences. While this strategy is powerful in helping disconnected teachers (and others) understand the new ways their colleagues are working, it also problematises the decisions about public verses private membership and netiquette issues.

TECHNICAL DECISIONS

In planning the VECO project, and especially deciding how the e-mail list might be developed, there were a number of technical decisions to be made about opposing community values. Public archiving and open subscription means that people are free to join and their contributions are accessible publicly. This choice needs to be made in consideration of the options of keeping traffic private and having a gatekeeper (list manager). As an open, archived list, VECO is very public, requiring that workshops, the web, welcome messages and other dialogue remind members of its open nature. It was predicted that public access would determine the online netiquette. However the data suggests that people are more concerned about what participants on the list say and do and that the openness to other people outside of the community through the web, is less of an issue. On the other hand, the public nature of a list may explain why many participants are more likely to e-mail privately to community members than broadcast their ideas to the list. This is confirmed by the 45% who self identified as "active lurkers" compared to the 20% active users and 34% passive lurkers in the formal evaluation of the VECO project (ASTF, 1998).

CHANGING HABITS

This evidence suggests that vocational education coordinators like many educators, are discovering that having access to e-mail alters working patterns and that access to timely information influences responsiveness. However, the long and short of e-mail access is that it adds work to the day and thus the community and the community managers have to adopt habits and set in place infrastructure that enables people to work efficiently online.

Understanding e-mail as part of the day's chores is reported often in VECO data. The following comment reveals that some are making interesting shifts and others may never cope with changing circumstances.

Think about how you start your day: the first thing you do is check your mailbox at home and your pigeon hole at work - two vital vehicles for information delivered on a daily basis. In the connected world of work those of us with an online life now add 'checking e-mail' to the list of starting tasks for the day to keep in touch with latest replies reported from the surveys. The VECO community has from time to time, debated this issue and although differing opinions continue, replying to the sender seems to match the patterns that have emerged in the community.

Wild (1997) suggests that participation in lists, no matter which options are implemented, is always quite low and more a reflection on time management issues, and the influence of broadcast media and print causing people to be willing lurkers. In comparison to many educational list communities in Australia, VECO has reasonably high participation. At the time of writing, the voced-coord e-mail list has over 600 members, with net growth of about 20 per month with no overt promotion. The monthly volume of messages oscillates around one hundred per month with contributions from about 12% of the total membership. However encouraging this statistic, the VECO team are becoming increasingly aware of how far the messages on the VECO project reach and how it is influencing other projects associated with the VECO community and affecting how vocational education coordinators work (ASTF, 1998).
developments, find out the news, share ideas and seek advice.

People vary in how they make use of VECO. Some use it a little and some a lot. Some see it as an essential part of their operations and others go there because they feel they must. Some read every piece of paper in their pigeonhole and others make liberal use of the recycling bin. Those who have been online for quite some time may have worn out several 'delete' keys, as they become skilled at scanning their e-mail and identifying those messages that are relevant for them at that time.

Catherine, VECO contributor.

The perceptions about time management and e-mail management concern many participants in multiple online communities. In the VECO community, some participants see managing mail as a significant issue. Some complain about the volume of mail, though others have labelled it as a small-volume e-mail list. Some rely on the 'too many messages' arguments as rationales for not being members of their online professional community. Others have had opportunity to learn some effective habits and make use of the technical options of their systems and the VECO system to manage mail efficiently.

Mail to the VECO list contains a prefix 'VocEd:' This was done deliberately so that recipients could distinguish VECO mail from other mail in their 'In' mailbox. Further the prefix makes it simple to build filtering formulae so mail to VECO can be filtered into a mailbox, other than the 'In' mailbox. Participants in workshops are taught about these features of VECO and their mail systems and also taught to delete liberally in those times when mail traffic seems overwhelming. The archive of the list, available through the web, provides a 'backup' for mail that might want to be read later. Workshops also deal with issues like the netiquette of long mail, unnecessary mail and the use of subject fields, so that mailers can maximise the chances of mail being read and understood. Feedback from workshops suggests that addressing these technical tips and techniques is very significant. The ASH team is able to conclude that technical decisions they have made and the netiquette patterns they seek to establish, have influenced the habits participants adopt.

The following contribution to an interview is typical of reactions collected in data and illustrates the link between time management and task management.

'After 'dabbling' with e-mail for a while it became clear that if you used e-mail for work purposes you needed to get a daily routine happening so messages don't get forgotten about or not responded to (my personal pet hate). So now, every morning I get to work half an hour earlier to read and respond to my e-mails. It is a great way to start the day!'

Jacqui, a VECO user.

It would seem that VECO participants are not only adapting to the new medium within their work, but also gradually learning about new opportunities that connectivity enables. There is now some evidence of scattered people working on collaborative development of projects, joint presentations at conferences and shared writing tasks as well as organising face-to-face gatherings for specific purposes. Sometimes these changes are subtle and occur over a prolonged period of time and it is only when participants reflect on the factors and circumstances that have enabled them to work in this way, that they begin to appreciate their impact.
THE ROLE OF THE COORDINATOR

From the inception, the VECO coordinator has been conscious of the problematic nature of her role. It was predicted that at first, she would be a central figure in developing online activity and that as the project expanded, the momentum of dialogue would require less and less of her direct involvement.

The intention from the start was to play a facilitating role. The lessons learned from the literature of CMC were taken on board. However, much of that writing is from the perspective of an online class of some kind where the moderator is actually the content expert. The VECO coordinator saw her role as somewhat different, in that she would be facilitating the discussion by nudging in the background, sometimes initiating topics but mostly doing whatever was necessary to bring the collective expertise within the community to the foreground. She was loathe to be seen to dominate the discussion but preferred to let natural leaders emerge. While this certainly happened spontaneously, the online guests turned out to be an excellent way of stimulating focused discussion, achieving this in a highly structured way.

As mentioned previously, the VECO coordinator's role was informed by the existing research and included elements of welcoming newcomers, initiating discussion, as well as providing technical and emotional support where needed. In addition she consciously modelled behaviour, both by the breadth of postings to the list and by their technical construction. From time to time she sent 'housekeeping' messages about technical issues, like not sending attachments. She was conscious however not to let the list become another online space for talking about the technology and often chose to deal privately with technical issues that were apparent from people's posts.

This original assumption that the coordinator's role would be a diminishing one has not proved to be correct. A detailed monthly analysis of list traffic undertaken from the latter part of 1997 revealed that although participation had grown in volume and involved a larger proportion of the membership, the project coordinator's contribution remained around 20% of total messages. Traffic from the VECO coordinator is not diminishing but rather changing in nature as the community grows and matures.

Like any online community, VECO has its peaks and troughs. The project coordinator monitors this quite closely, being proactive in stimulating conversation when necessary. This means that her regular contributions result in a steady flow of traffic. Moreover, the increasingly prominent role of VECO in the national educational agenda, means that the coordinator is contacted often and sent information which she then passes on to the VECO community.

The peak of the mail traffic extremes tends to occur with online guests and controversial topics. For the participants in VECO, the online guest concept has been popular and definitely provided focused discussion. Guests provide an opportunity for a flurry of traffic. One interesting consequence of their contributions is that other topics tend to emerge simultaneously. Adequate traffic on the list becomes self-perpetuating, as does prolonged silence. Thus the coordinator often creates reasons for traffic by hosting events and stimulating conversations.

Helping participants understand their contributions and their impact on their personal lives, the lives of others and the nature of the online community is important. Through the workshops and other conversations, people are encouraged to reflect on the contributions that they can make and the value of everyone contributing from time to time. Encouraging people to take the initiative to post a message when traffic is quiet reveals that many do not value what they can offer. It is believed that this reflective process has contributed to significant numbers of participants now showing initiative.

Whilst the coordinator's role remains a significant one, the nature of it has shifted and continues to evolve. There are a substantial number of participants now who are from the wider VET community. For example, industry folk are becoming involved, in a welcomed development. As the community grows, its needs become more diverse and the coordinator sees the role as being responsive to these needs as well as proactive about introducing new communications tools that can add value to...
current activity, and nurturing those who wish to undertake projects of their own.

**CONCLUSION**

The face of VECO is changing. As the community grows larger and more creative events are hosted in the project, the participation, patterns of management and the impact of the project will mature. Because it was based on a community's definition of the Internet, VECO was always going to be more substantial than yet another store of important information for people to access. It was designed to be a place for people to communicate and share and to add value to the information archives they were building. As one VECO workshop participant put it, 'The community of VECO adds lenses and filters on information and our web site says 'Lurkers come out'.' (Melbourne, December 1997). Managing a project like VECO is challenging because assumptions always change slightly as people's experiences online begin to alter how they work, who they work with and what they do. Constant data collection and continual debriefing of activities and events mean that the VECO project can mature, be fine tuned and look forward in a way that changes as the participation patterns change.

For the VECO management team, new questions are emerging. As the community grows, several small discussion lists, VECO café events and multiple community tools in the VECO website may draw attention away from core veced-coord list. Further, as multiple people initiate projects and dialogue in the list, the nature of VECO and its atmosphere may alter. Although this is a trend the management team welcome and expect, the questions of what tools to build to enable people to participate in the new events become significant. Amidst such a maturation process, there remains the need to care for the new beginners who are coming into what will seem to them to be a community of long term experts. Meeting the needs of old timers and new beginners within the community of practice will be an important issue for both the management team and the VECO community.

All groups building online communities as professional devices and learning communities will face these questions and issues. The networks, which sustain our communities, should be used to share knowledge we are gaining about managing online events, nurturing communities and building community tools. It is important that research and expertise be shared to help all education stakeholders help the profession mature in their use of communications technologies for their work.

**REFERENCES**


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