

ARE YOU ON THE PD CYBERTRAIN OR STILL HESITATING ?

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Introduction

Globalisation of the world economy, together with the Internet and rapid technological developments, have 'reduced' the size of the Earth, making means of communication both greater and easier, and knowledge more accessible to all. If we, the educators, do not want to be left stranded on the 'platform', ongoing professional development is essential as we enter further into the technological workplace and an information-based society!

Today's learners are often technologically savvy, as surfing the Net, sending SMS messages, text chatting with IM, voice chatting with VoIP such as Skype, and gaming are all part of their day-to-day lives. They are the Net generation or the Digital Natives (Prensky, 2001). Yet, in the traditional classroom, learners are being more enraged than engaged (Prensky, 2005) or just passive, because we as educators, have not all got on the professional development cybertrain.

What do I mean?

We all agree that technology should not be used for technology's sake, but we have to accept that recent paradigm shifts (Jacobs et al, 2001) together with new accessible technologies, the needs of the 21st century learners, and just-in-time learning (<http://webphysics.iupui.edu/jitt/jitt.html>) are changing the educator's role.

Branson (1999) suggests that the education system experienced a long period beginning in the early 1960's, in which educational performance remained static despite financial investments due to resistance to change within the educational system. We may be emerging from that hiatus with the technological breakthrough of the Internet. Treadwell (2005a) refers to the Book Based Paradigm as a time when the emphasis was on knowing and books were the essential knowledge resource for educators. He uses the term 'Internet Based Paradigm' to indicate where the advent of the Internet, new technologies and increased bandwidth have forced a paradigm shift to a learning-centred environment, leading to rapid increases in learner performances and understanding. The illustration below (Treadwell, 2005b) delineates the educational performance (blue line) from the 1600's to 2015, showing a paradigm shift away from the teaching-centred model where the educator is the source of knowledge, to a more learning-centred model.

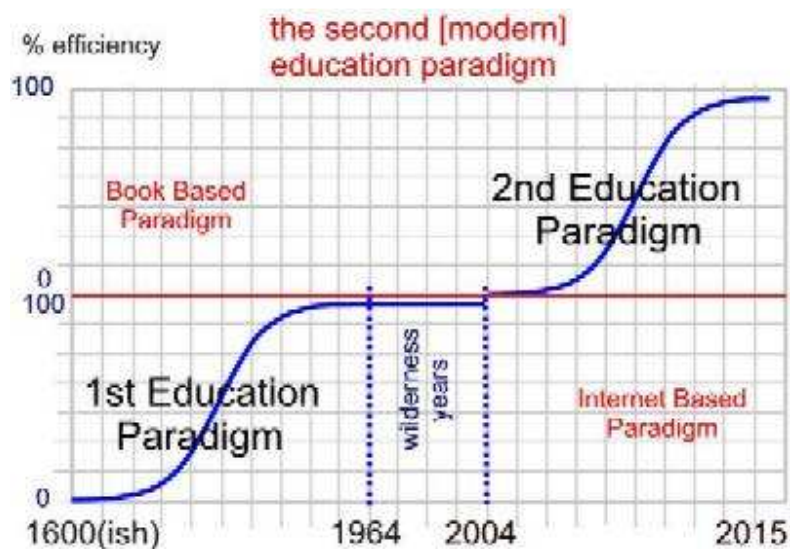


Figure 1. Paradigm Shift: The Second [Modern] Education Paradigm. Retrieved from http://www.teachers-work.com/archive_Nov_2005.htm.

In the following illustration, Treadwell (2005a) lists characteristics of an Internet based paradigm, made possible through the integration of new technologies in a learning-centred environment, as opposed to the teaching-centred first education paradigm. Within this second

(modern) paradigm, the educator guides the learner in integrating technological tools to explore the real world outside the constraints of the traditional classroom.



Figure 2. Overview: Transitions from Book Based Paradigm to Internet Based Paradigm. Retrieved from http://www.i-learnt.com/Paradigm_2.html.

All this suggests that in order to enhance learning-centred instruction within formal learning environments for higher education students and adult learners, we must carefully review how we plan, design and deliver our ‘lessons’ in order to engage our students in the learning process.

This becomes imperative if we take into account the recent IDC report (Anderson and Brennan, 2004) which states that “one third of learning occurs in a formal setting. The other two-thirds of all learning is ‘informal’ in nature and occurs either spontaneously as a result of incidental experiences or as part of an intentional search for a specific piece of information”. Cross (2006a) states that it is even less, a mere 20%, finally resulting in less than 1% of behaviour change attributable to formal learning.

To ensure that we are providing the necessary set of skills for the 21st century Digital Native learners, educators must adapt an inquiry-based approach to engage them in interactive, collaborative learning experiences which are hands-on, task-based, and project-based. In this new teaching/learning through technology paradigm, educators are no longer the “sage on the stage” but become the “guide on the side” (King, 1993) as knowledge facilitators. By adopting this new role and making necessary transitions, we can develop learners’ high-order thinking skills through the careful incorporation of available technologies and guide learners to use vast amounts of available information wisely, both in and out of the classroom environment. Learners will then be better able to appreciate the relevance of their formal learning and expand

and explore further in informal learning environments. In this way, we are also preparing more advanced learners for their future role in the global professional world and supporting the adult learners already in the workplace, by guiding them in online communicative collaborative tasks and projects, thus empowering the learners and encouraging autonomous learning.

Greater accessibility to metadata and knowledge banks, together with the evolving learning-centredness of instruction and training, have also led to a shift towards just-in-time learning (JIT), whereby learners access the exact information required as they need it rather than just-in-case learning (JIC) which entails a different teaching approach. This implies a need for yet further professional development on the part of the learning professional.

A further element to be considered is the mobility of digital learners. As we accumulate online experience over time, it can now be observed that the traditional classroom has occasionally been replaced with a 'sit-in-front-of-pc' static learning environment, whilst in contrast, our learners have become an increasingly 'mobile' population, both physically and technologically. The illustration below classifies the mobility of technologies (Naismith et al, 2005). It is clear that different types of personal portable technologies are becoming more abundant and that mp3 players and iPods can be added to this cluster.

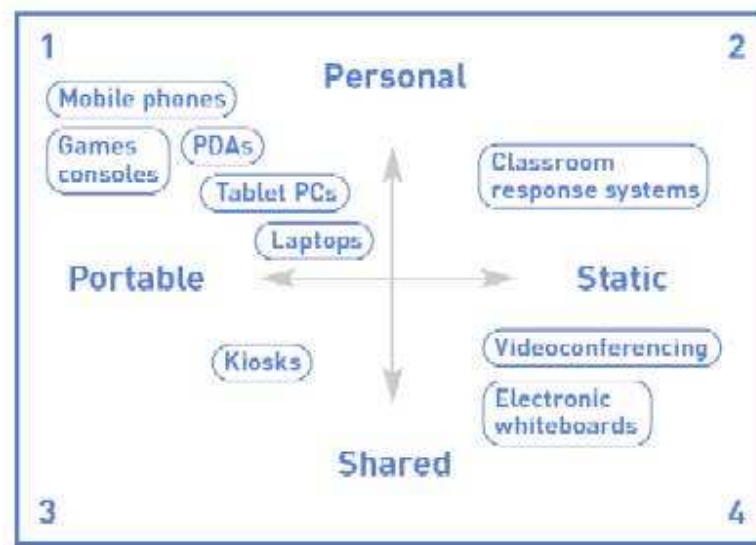


Figure 3. Classification of mobile technologies. From http://www.nestafuturelab.org/download/pdfs/research/lit_reviews/futurelab_review_11.pdf (p. 7).

As we come to realise the potential of m-learning for mobile professional adults and off-campus students, and the importance of 24/7 access, research- and discovery-based learning are essential to link the learning experience to the learners' formal and informal learning environments, without intruding upon the ownership or privacy of these tools (especially mobile phones)

which ‘belong’ to the learners’ social lives, and help shape their ‘social identity’. Greater research is needed here in order to appreciate the benefits of m-learning. However, some innovative educators such as Tony Vincent (<http://www.learninginhand.com>) have already engaged today’s learners using PDAs, Buthaina Al-Othman has been engaging her students using cell phones (http://alothman-b.tripod.com/tesol06_callis_acsession0316.htm), while others are focussing on Skypecasting, blogging, and podcasting (e.g. Stanley, 2006).

The need to integrate technology can only be established if the educators themselves understand and know what its potential use to the end-learners can be. Ongoing hands-on, experiential learning is therefore essential for educators’ professional growth.

What do we need to attain this new role?

This new role assumes the following:

- access to new technologies;
- knowledge of these new technologies;
- training in these technologies;
- allotted time for course design and development;
- institutional support;
- collegial support;
- technical support.

Sadly, these requirements do not exist in most educational institutions for various reasons. Lack of finance has often been a reason, together with reluctance and resistance on the part of the educational bodies and colleagues to adopt new ways. Other factors include lack of training and time, teacher technophobia and poor choice of technology for the desired learning objectives and outcomes. Moreover, impediments may unwittingly be placed in the path of instructors who wish to use technology, as the following email exchange illustrates.

“Can these extra headsets be ordered with mics, please ?

Cheers,
Moirá”

“Re: the ones with mics., could you explain please what you hope to be able to do with them?!”

Author Undisclosed

Figure 4. Authentic email conversation extract dated 09.03.06 between M Hunter and senior institutional educator.

Many corporations have been faster than academic institutions to recognise the benefits of new technologies and have adopted them to disseminate corporate training but have also often lacked the necessary pedagogical training to facilitate and foster an enriching online learning experience for employees, despite large investments in systems and programmes. Weaver (2002) posits that expertise is needed to ensure the success of online learning and offers advice to organisations to avoid the ten most common pitfalls leading to failure.

Whereas many educators are still desperately behind in adjusting and adapting their approach to meet the expectations of today's 'global' learners' some independent learning professionals have caught the cybertrain to catch up in their own self-directed development. In doing so they acknowledge the paradigm shift and become lifelong learners themselves in an ever changing, complex environment, sharing their knowledge and interacting in a networked world.

However, educators are often reluctant to change or to share their knowledge. Norris et al (2003) report that "academic knowledge substantially remains a cottage industry" and that "the knowledge ecology of colleges and universities will need to change if they are to move from a culture of knowledge hoarding to one of knowledge sharing".

Fortunately, some innovative institutions and individuals have been spearheading this 'new paradigm' for some time and have created banks of knowledge data and networked communities of learning and best practices, together with effective and ongoing professional development. We look now at some of the needs such communities address, and consider in particular, the accomplishments of one such community, Webheads in Action.

Educators need help to use new technologies and to feel comfortable in incorporating them in their long-term strategy and planning. They need help in instructional design and mentoring for online environments, together with online intercultural communication management. None of this can be achieved overnight with a one-off training input. It is an ongoing process in which educators must be guided, encouraged and motivated in a 'discovery learning' virtual environment, whether using asynchronous tools (such as blogs and podcasts) or synchronous tools (such as instant text chatting, or 'real-time' live online tools such as webcasts and videoconferencing). Varied and multiple opportunities must be sought out and explored in order to gain 'confidence' in the online environment. Educators need to exchange ideas, successes, and failures with each other, and try out different approaches to problem-solving tasks using different strategies and tools in order to appreciate the pedagogical advantages and disadvantages of using such tools.

Educators need to have the opportunity, time and funding (where necessary), to try and test different technologies with different approaches. Through trial and error, fine-tuning is possible and only once this occurs can the educator feel comfortable in incorporating this new approach for their learners, blending face-to-face with online learning experiences. With this level of comfort and confidence, educators can make ‘on the fly’ changes to their courses to optimise the learning experience and environment for 21st century learners.

How can these needs be addressed?

Where institutional and collegial support is partial or non-existent, cyberspace can be a very lonely place and can consequently lead to abandonment or failure on the part of the educator. As individuals, we must take our learning into our own hands if we want to catch the professional development cybertrain and embrace new life skills in a cycle of continuous learning!

As learning professionals, we must be aware of what can be done easily, with little or no cost and independently of an institution or corporation. We must be self-directed in our own professional development and seek out opportunities for lifelong learning. We must experience for ourselves what we intend our own learners to do.

Putting ourselves into the role of online learner is highly beneficial, as we can evaluate the positive and negative aspects regarding the environment, tutor support and availability, the tools used, course design and delivery, and online peer collaboration and community building within the duration of the course. The more online courses teachers can take as learners, the greater the insight which can be gained regarding the nature of best online practices.

However, this is still not enough, as courses have a lifespan, coming eventually to an end, at which point the asynchronous and/or synchronous communicative collaboration ceases totally, or at best, is substantially reduced. Furthermore, when a course concludes, the learning professional can often feel an ‘emptiness’ or ‘isolation’ from disconnection after experiencing an interactive, dynamic online learning experience. In addition, whilst bandwidth problems are being reduced in an increasingly globally connected world in which new technologies and easier to use products continue to appear on what seems a daily basis, it is becoming increasingly difficult for educators to remain up-to-date and current.

In order to sustain professional development, some element of continuity is required. Traditional settings may have a staffroom for this purpose. Online globally dispersed educators need a ‘space’ for continuous collaborative professional growth where experiences can be shared and learning can occur in a peer-to-peer low-risk environment.

An ongoing, supportive online community of practice can address all these aforementioned needs and requirements.

What is a Community of Practice?

Communities have always existed in different countries and cultures and for different reasons. In the 21st century, the term community of practice was coined to refer to “the community that acts as a living curriculum for the apprentice” (see, for example, Wenger 2006). This term does not apply only to work apprenticeships but to “learning on the part of everyone” within the community of practice. According to Wenger, a community of practice is a group of people who share the same passion and desire to learn about something, who come together to develop their knowledge about the shared topic of interest, and who then apply this knowledge to a practice. Wenger states further that a community of practice requires three elements: a domain of interest shared by all members, to which they are committed; a community in which members engage in learning and interaction together and, thirdly, a practice, whereby the members are practitioners and share their experiences, both good and bad, within the community. (A quick start-up guide to cultivating communities of practice can be found at Wenger, 2004.)

Today, learning professionals may be connected technologically but they are disconnected in their professional development. Siemens (2003) maintains that “the connections we make (between individual specialized communities/bodies of knowledge) ensure that we remain current” and that “these connections determine knowledge flow and continual learning.” He further points out: “It’s the connection to continued learning, not existing learning, that is valuable”

Johnson (2005), himself a member of the Webheads in Action online community of practice, distinguishes the virtual or distributed community of practice (DCoP) from the physical (CoP), as its geographically dispersed members communicate using asynchronous and synchronous tools in computer mediated communication (CMC). Johnson says that whilst the group’s aim is to advance the community’s collective knowledge, the knowledge of the individual is increasing at the same time, resulting in ongoing opportunities to learn from one another. The non-hierarchical informal structure, which is self-organising and self-governing, evolves constantly as new members, both expert and novice, join the core members and participate to a greater or lesser degree of engaged activity. This informal environment encourages the transfer of implicit knowledge via the frequent exchanges, developing human relationships and leading to formations of subgroups of learning practice. Whilst novices may require explicit transfer of knowledge in some areas, the open community enables a continuum of expertise, a rotation of experts whenever a specific need is voiced. This social scaffolding whereby the learning professional can learn with experts, rather than learning on his or her own, enables knowledge advancement and continuous innovation as members share their own knowledge. Johnson provides a comprehensive interactive overview of CoP Theory in the diagram below.

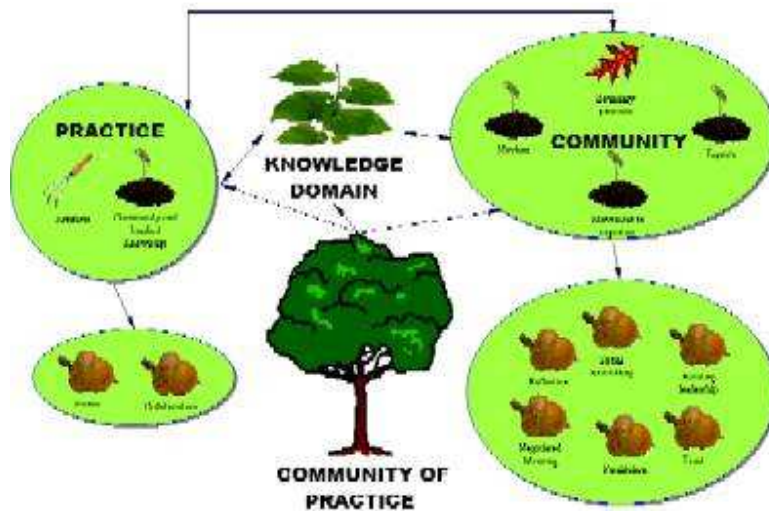


Figure 5. CoP Theory Overview (Johnson, 2002: <http://sites.inka.de/~W3446/cop/sitemap.htm>).

The building of such a community takes time to emerge into a social and collaborative environment of trust in which both experts and novices negotiate meaning, collaborate, facilitate peer interaction, and share learning goals. This environment emerges organically, leading to reflective learning which the practitioner can then transfer to the needs of the 21st century learner.

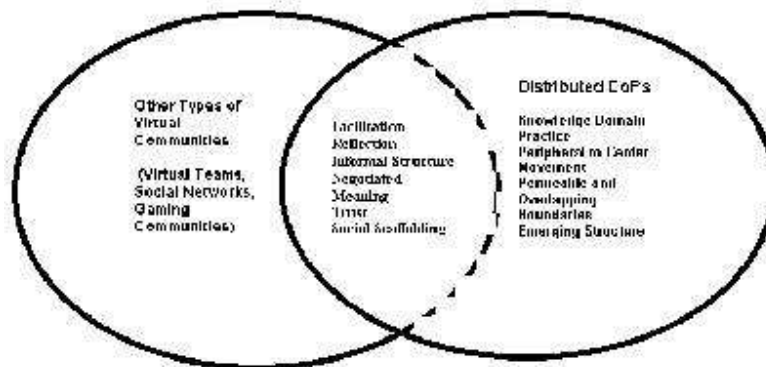


Figure 6. CoPs and Virtual Communities (Johnson, 2002: http://sites.inka.de/~W3446/cop/vc_cops.htm).

Communities of practice exist to provide the environment for educators to ‘learn by doing’, to seek advice from ‘seasoned onliners’ and networkers and find collegiality which is often lacking, even in large institutions, and where they can bring their own knowledge and be

appreciated by similarly thinking educators and learn and share with others. Collaborative projects with learners and educators in different parts of the world can be organised to enhance the online cultural learning experience for both learners and the educators or 'co-learners'. Within a community of practice, learning professionals can nurture the pursuit of lifelong learning by creating and then sustaining an online presence where experiences are shared and learning takes place.

Webheads is such a community of online practice which addresses the needs of the educator's changing role in the Digital Age.

The creators of this community in 1997-98 were Vance Stevens in Abu Dhabi, together with Maggi Doty in Germany and Michael Coghlan in Australia. What started as a writing and grammar online experimental class for students (<http://wfw.webheads.info>) has evolved into a thriving online community of educators with common enthusiasm and shared interest in exploring the uses of computer-mediated communication (CMC).

Webheads in Action

Webheads in Action itself (<http://webheads.info>) was created as a TESOL Electronic Village Online EVO session in 2002. Many of the members are language learning professionals. Webheads is a community of practice which offers learning professionals, both seasoned onliners and novices, the opportunity to self-direct their professional growth in a supportive online environment driven by their own enthusiasm, energy, generosity, and the support of the resulting collaborative community.

The purpose of the community is to help learning professionals understand the potential benefits of the appropriate integration of available Internet technologies into their teaching practice by first experimenting and learning in a hands-on, low-risk online environment before engaging their own learners. A further purpose of Webheads in Action is the continual and ongoing discovery of free and open source Internet tools, such as, to name but a few:

- Yahoo Groups (<http://groups.yahoo.com>);
- Skype (<http://www.skype.com>);
- Nuvvo (<http://nuvvo.com>);
- Springdoo (<http://www.springdoo.com>);
- Docebos (<http://www.doceboCMS.org/doceboCMS/>);
- Bubbleshare (<http://www.bubbleshare.com>);
- Vyew (<http://www.vyew.com>);
- Vaestro (<http://www.vaestro.com>).

A community, whether virtual or physical, needs a gathering place, where individuals can connect, interact, and collaborate in the creative learning process within the core community. Over the past eight years, this online gathering place has evolved for Webheads in Action with the emerging new technologies. Web 2.0 (O'Reilly, 2005), often referred to as 'the interactive Web' (Downes, 2005) in which users can create content and interact and collaborate online, has enabled members of the community to create their own learning spaces in the learning process. Web 2.0 technologies include wikis, blogs, podcasts, vodcasts, and other open, collaborative platforms such as:

- Drupal (<http://drupal.org>);
- Joomla (<http://joomla.org>);
- Elgg (<http://elgg.net>).

Other product name tools allow for collaboration, group member recognition, and knowledge sharing, all of which are given characteristics of a dynamic community of practice. Some examples:

- Writely (<http://www.writely.com>);
- Frappr (<http://www.frappr.com/c/user/createamap>);
- del.icio.us (<http://del.icio.us>).

Webheads in Action meet weekly in an informal setting using Tapped In (<http://tappedin.org/tappedin>) and also Skypecasts (<https://skypecasts.skype.com/skypecasts/home>), enabling group text chats and voicecasts, in which anybody may raise an issue or just socialise. Yahoo Group membership allows continual communication, enabling practitioners to seek advice, share experiences and resources, and set up student and cultural learning projects across the globe using Internet technologies.

Siemens (2003) suggests that learning communities should have different spaces for different types of learning and stages within the learning process (the major spaces are listed below). Webheads in Action is comprised of these very spaces, enabling members to learn, interact, collaborate, discuss, share, and trial in a safe, trustworthy low-risk environment.

- A space for Gurus and Beginners to connect (master/apprentice)
- A space for self-expression (blog, journal)
- A space for debate and dialogue (listserv, discussion forum, open meetings)
- A space to search archived knowledge (portal, website)
- A space to learn in a structured manner (courses, tutorials) (Siemens, 2003)

According to Kim (2000), the robustness and therefore survival of an online community of practice also lies in the variety of leadership opportunities which can be offered to regular core members. She argues that it is important for members to have their developing skills and achievements acknowledged by an audience in order to strengthen the sense of communal belonging. Webheads in Action, already extremely active with an important online presence, not only gave the opportunity to participate in the first ever online convergence to core members but also to non-members and near novices.

This virtual community of practice held its first completely free convergence from 18 to 20 November 2005 with volunteer support and practically non-stop back-to-back conference presentations. Webhead members were involved in the pre-convergence planning and organisation, the support and maintenance throughout, and the delivery which included online helpers during the convergence to 'guide' the visitors and the many presenters and co-moderators. Invited speakers included Curtis Bonk, Randall Davis, Joy Egbert, David Nunan, and Dave Sperling, all of whom volunteered their services and expertise. Webhead presenters shared their skills, accomplishments and reflections with the online interactants, and it is important to note that nobody was paid.

It was a marvellous example of community spirit and professional development, offering participants a myriad of examples of best online practices and cutting-edge technologies being used by learning professionals throughout the world in an informal learning environment. Seasoned and novice onliners were introduced to tools, concepts, ideologies, and practices in an environment encouraging multi-tasking and risk-taking on the part of the participants. For those who 'dared' and followed as many presentations as possible, the experience was dynamic, thought-provoking, and beneficial, resulting in chaos navigation (to quote Sus Nyrop's term), skipping from one platform to another and sometimes between platforms such as Elluminate (<http://www.illuminate.com>), Alado (<http://www.alado.net>) and Worldbridges (<http://www.worldbridges.com>), with most participants having multiple windows open on the computer screen engaging in different text chats. F.U.N. or "Frisivolous Unanticipated Nonsense" was certainly had during this extremely intense 'learning and discovery' weekend. Webheads supported each other mutually throughout the convergence, attending and interacting in each others' presentations, together with the participants. Recordings and details of the convergence can be found at <http://schedule.wiaoc.org> and can be perused at leisure.

Vance Stevens, the founder of Webheads, stressed in his wrap-up of the convergence that the community and the convergence was only possible due to the "reliability" and "dependability" of the Webheads, saying they "get paid in karma here". He re-purposed the term "cat herding" comparing Webheads to cats which are independent, powerful, and beyond control. He also stressed that being a Webhead means that "you develop skills" and "you use tools" and finally, "you have to do it because it keeps you employable".

Elluminate Live! - LEARNINGTIMES-WIA-014 20 nov. 2005 14:20:32



Figure 7. “Converging on Bridges Across Cyberspace: The First WiAOC 2005” by Vance Stevens.

Many participants then took part in the most recent EVO Sessions (<http://webpages.csus.edu/~hansonsm/announce.html>) in January, 2006, where during six weeks, they explored further the technologies and pedagogical practices seen in the WiAOC Convergence. Hands-on experiential learning, academic reading, and discussions together with ongoing community building were the key points to these very intense weeks.



Figure 8. Hands-on learning and multi-tasking : EVO Session January 29, 2006 .

Global Participants shown above:

- Cristina Costa (Portugal),
- Randa Effat (Egypt),
- Amanda Fava-Verde (England),
- Moira Hunter (France),
- Ibrahim Rustamov (Tajikistan)

Have you noticed how many new words such as “podcasting”, “vodcasting”, “learncasting”, “RSS”, “Web2.0”, “webinars”, etc. you must manually add to your word processing dictionary recently? We are in a rapidly changing world in which we, as educators, must keep abreast of change in order to be able to engage, rather than enrage, Digital Natives in their learning process. We must embrace lifelong learning ourselves and acquire new skills. Social networking, scaffolding and belonging to a robust virtual community of practice like Webheads in Action keep members connected and provide ongoing opportunities for collective and individual professional development.

Jay Cross (2006b) writes in his blog that “the informal learning train is leaving the station.”

Not got on the professional development cybertrain yet?

Still hesitating?

Don't !

Let's ride the cyberrails together!



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Editor's notes

The author was co-presenter at a regular session at the Webheads in Action Online Convergence on November 20, 2005.