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PLN: The paradigm shift in teacher and learner autonomy

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PLN: the paradigm shift in teacher and learner autonomy

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This presentation explains a dozen tools and paradigm shifts that teachers should apply in transformative ways to working with their students, how Web 2.0, tagging, and RSS are crucial to this process, and how teachers can develop their own personal learning networks to practice continuous lifelong learning and 'teacher autonomy' before applying these concepts to students.

WHY

In talking with relatively connected teachers in the summer of 2010 in Argentina and Brazil, I learned of their difficulties in convincing other teachers that utilizing technology in their teaching is important. I was given the impression that many teachers in this corner of South America feel that it isn't. They feel they do fine without it, they don't see why they should go to the trouble to learn how to use technology when they have so little intrinsic interest in it and they're not getting paid to do it. If true, this would be different from many parts of the world where more and more teachers are intrinsically interested in leveraging the affordances of technology in education and feel it is important not only to their futures but those of their students. Therefore in my talk I feel I have to establish a rationale for why I feel technology is important and should be learned by language teachers in order for them to meet a large part of their responsibility to their students.

So in my slide show, I ask, "Would you agree that … ?

- 20th century educational precepts are rooted in industrial era needs
- 21st century knowledge worker skill requirements are radically different from what was needed in that era

- Each education system should teach the new skills necessary to prepare the new generation of knowledge workers *across the curriculum* and, who's going to do that??

- Therefore, teachers are responsible for improving their own skills in order to model the new skills their students will need to adapt to jobs that haven't been invented yet *across the curriculum*

What are some of these skills?

To give my audience an idea of the scope of the problem, I Introduce my "baker's dozen" of concepts, tools, and genres which I think represent some of these new skills, and which have tremendous potential to impact learning for users who have made the paradigm shifts that we discuss in this talk. In other words, these are some manifestations of these shifts in thinking, and I throw out

these to see who has heard of these tools and concepts, which appear of interest (or not of interest), and which my listeners are using already:

In Sao Paolo I asked my listeners to all stand up and then sit down when we reached any part of the list they didn't feel comfortable with. Almost everyone had sat down a third of the way through the list, but a few remained standing throughout.

1. Web 2.0
2. social networking
3. RSS and feed readers
4. Blogging, both for multiliteracy skills and as further illustration of RSS
5. Podcasts (harvesting them, as examples of application of RSS; but also producing them, as vital resources in ongoing learning and professional development)
6. Microblogging (e.g. Twitter)
7. PLNs (personal learning networks)
8. Digital storytelling
9. Applications of multimedia to new literacies
10. Multiliteracies
11. Distributed learning networks
12. communities (of practice)
13. connectivism
14. Aggregation via folksonomic classification systems as opposed to taxonomic ones
15. Informal learning
16. just-in-time learning
17. Push/pull technologies
18. Synchronous communications: instant messaging, Skype, and online presentation venues incorporating interactive whiteboard, voice, and video such as WiZiQ http://wiziq.com
19. Asynchronous collaborations tools: blogs, wikis, Voicethread, Slideshare, Google docs and similar collaboration tools

For those who accept the importance of learning more about these tools and concepts, the rest of the talk will address:

- What constructs teachers will need to change in order to adopt and assimilate 21st century skills and successfully prepare students for jobs that haven't been invented yet, and
- how teachers can themselves learn to successfully make themselves 21st century knowledge workers.

WHAT
In order to change the system overall, everyone in it needs to re-learn how to learn. This is not as radical as it sounds. Our world and how we adapt to it is

constantly changing, so people learn as they notice the changes and alter their behaviors accordingly. What is slightly radical is the notion that in order to learn enough to feel confident of one's place in the world that is to come, heuristics for learning that worked last century are no longer the most appropriate ones for success in the 21st century. A better heuristic for learning in the 21st century is connectivist, networked learning.

Here is a logical illustration of why we need to re-learn how to learn:

- Are teachers factory workers or knowledge workers?
  - Factory workers are trained with enough literacy to enable them to carry out assembly line tasks. The knowledge required for this is repetitive and regurgitative, not generative.

  - Knowledge workers need to constantly re-create knowledge. In order to do this, they need to be able to access and contribute to knowledge resident in networks.

- And for which role are we training our students?

  - In order for educational systems to accommodate these skills, a paradigm shift is required.

  - There are many aspects to how we must shift our worldview; learning through cultivation of networks is key to bringing this about.

Today's learners may be predisposed to this kind of learning, though it is not often modeled by their teachers, many of whom retain didactic styles of teaching. As Jonathan Zittrain says, "Many among the new generation of people growing up with the Internet are enthusiastic about its social possibilities. They are willing to put more of themselves into the network and are more willing to meet and converse with those they have never met in person." (p.234)

What changes are needed?

I have developed a list of ten paradigm shifts that educators must make in order for them and their students to successfully adapt to changes in literacy in the new era. I have presented them before, both in talks and in publications, but they are key to understanding and adapting the new technologies (see Stevens, 2010. and http://www.slideshare.net/vances/shifting-sands-shifting-paradigms).

1. Pedagogy – Educators must shift from **didactic** models of "teaching" to **constructivist** ones emphasizing "learning". This suggests a re-thinkng of the means by which knowledge is shared and implies that educators avoid lecture modes (where students "sit and get") in favor of modes where experts move off center stage in favor of learners (to become a "guide on the side" returning only to model and demonstrate).

2. Networking – Educators need to move from regarding learning as an **isolated** activity (as assumed by Ryerson University for example, in accusing Chris Avenir of cheating for forming a study group on Facebook http://www.thestar.com/News/GTA/article/309855) to **connectivist** models along the lines of communities of practice and personal/distributed learning networks.

3. Literacy is moving from its last-century dominance by **print media** and tending toward **multiliteracies** approaches that better accommodate how people articulate and communicate when a plethora of digital tools and connectivities are available.

4. Heuristics for learning – The most productive models of organizing learning are moving from **top-down client/server** relationships between repositories and seekers of information to **peer-to-peer** ones, where those with knowledge and those seeking it treat each other equally, often reversing roles frequently as seekers and providers of knowledge and content.

5. Formality – Degree of formality in education is moving from **power-centric** models with traditionally defined roles to much more **informal** models where fear of being exposed as not "knowing" is replaced with encouragement of exploration and discovery by all involved in the learning process. This increases the chances that F.U.N. (Frivolous Unanticipated Nonsense) will enter that process, when learning is driven less often by sets of activities with predictable outcomes.

6. Transfer refers to the ***ability to see that something you do in "informal" parts of your life can be utilized in more "formal" aspects***; for example, seeing that the way Facebook or mobile telephones are used to organize and connect your personal world can transfer into how learning can be facilitated in your professional life, both as a teacher and lifelong learner.

7. Directionality of knowledge transfer is trending from **"push"** systems, like email, where content providers (including spammers, advertisers, and office wags pushing cute attachments) control what comes your way; to **"pull"** systems e.g. those using tagging and RSS to aggregate and filter what recipients request to see, on demand.

8. Ownership is trending from the **proprietary** models prevalent toward the end of last century (e.g. Microsoft Windows and Office; Blackboard LMS, Sound Forge, Camtasia) to **open source** models (Linux, Open Office, Moodle, SourceForge), greater availability of freeware (Audacity, Camstudio and uTIPu), and the ascendancy of **OERs (open educational resources)**.

9. Sharing – Educators are viewing **copyright** not as something that stifles the use of intellectual property but along the lines of the **Creative Commons and fair use** models, which allows content to be shared and remixed within parameters that credit its creators and specify fair use.

10. <u>Classification</u> of learning objects, websites, bookmarks, photos and music, and even filing of email is moving from **taxonomic** models to **folksonomic** ones, where the most effective systems for organization and subsequent recall are not fixed and pre-ordained ones (taxonomies) but generative ones where stored objects are categorized by multiple users who simply tag them on the fly and so invent organic, flexible systems of retrieval (folksonomies) that would otherwise be chaotically stored in "the cloud," unmanageably irretrievable in a taxonomic system.

HOW

Consider how I came to Brazil and Argentina this year. I was not invited per se, but I have been involved in an active PLN, Webheads in Action, since 1998. WiA came about at a time when it was novel for teachers to connect, and when many who joined us at that time claimed they were learning more with us than in their degree programs.

Webheads started out as a group but quickly we recognized that we had many community characteristics. Then, once we had expanded over several communities, we came to think of ourselves as a network.

This network overlaps with others; for example, FLNW, the Future of Learning in Networked World, which attracts educators such as Michael Coghlan, Barbara Dieu, and I in getting together with other like-minded educators in various parts of the world for endeavors such as this one.

My participation in BrazTESOL10 in July was ostensibly to be a part of FLNW for this year, and I have extended the concept to include my meeting in August with teachers in Argentina who are also in my WiA, hence FLNW, network.

HOW does this work?

It's like chemistry; it needs some ingredients, and once they are present with the proper catalyst, the process begins.

What are the ingredients?

The catalysts, the means to put the parts into contact with one another, are:

- The Internet
- Network infrastructure

- A general movement toward paradigm shift

The reactants:

- Web 2.0
- models and participants,

- an agreed upon space in which to meet

Whether you are at my presentation or are reading this online, we are now in an agreed upon space and I am modeling. What am I modeling?

- A slightly didactic approach to information transfer, since it's pretty much one way transmission, me talking, you taking it in.

However, I am modeling other things as well

- Depending on connectivity, I could be b/casting to the world at large
- I could have used my PLN to get participants from overseas into this discussion (I hope to try this when I give another version of this talk in La Plata)

  This would be synchronous; how about asynchronous

- I have created a portal for my presentations.

  o I have given it an easy to remember URL: http://braz2010vance.pbworks.com/

  o This models e-portfolios, whereby students can create eportals and link their projects to them

  Here we model a web that is used not only for assimilating content, but for creating it

- If this presentation is recorded; it will be podcast

- The text of this presentation has been placed online

- The slides are available on Slideshare at http://slideshare.net/vances

- We model sharing via creative commons: The slides are available for you to download and use as you like as long as you attribute their source and share them (or any derivative) with others in the same way as they are shared with you

We can also envisage ways by which this content could be critiqued not only by teachers but by peers (students or other teachers). We could move farther away from a traditional lecture format, what Wesley Fryer likes to call, 'sit and get', where learners are relatively passive receptacles for what is being shown them. My audience COULD have laptops and 3G phones. You could now be tweeting what I'm saying or about what I'm saying. You could have a back channel going amongst yourselves, or with those not present, or even with me. If we were all connected, we could set one up in Twitter, Yammer, Edmodo, or Poll anywhere. The conversation could continue in Buzz, Facebook, Moodle, or other

asynchronous forums, such as the comment section on the wiki at the bottom of this page: http://braz2010vance.pbworks.com/PLN.

In this way we model the paradigm shifts mentioned above, so I am modeling some of these precepts even as I speak here didactically.

How to CHANGE by moving learners from consumers of content into content creation, gradually.

Now, when I model these things, does this change your practice? Will you walk into your next class and teach any differently than you did in your last one? Etienne Wenger (2007) asked Cristina Costa when she knew she was in a community of practice and she said, when she noticed her practice had changed. And this is the correct answer. When your practice changes, you know you have truly learned. The next step as a teacher is to model what you did for your students so that some will follow in your footsteps.

So how can you do it? Your change in practice probably won't be from this one encounter, unless I can convince you or nudge you, if you were heading that way already, into taking the next step in your journey. The goal is to move from being just a consumer of networked content, which you in essence hoard, to a creator of content, which you share with the network that shares with you. What are these steps?

1. Awareness: become a consumer of content

You need to become aware of what is 'out there.' It's like learning a language. You have to develop an awareness of basic communications in that language. Hello. What is your name? What is a blog? What is a tag? How can I subscribe to a podcast? How can I set up a feed reader so it will pull to me just the content I want to follow? How can I set up a feed reader so it tells me when my students post to the blogs they are keeping for my course?

These move from hello to a relatively high level of awareness. But they illustrate some of the steps along the way. Learn where the good blogs are, read some, find out where you can read more online, where you can access podcasts, where you can find free training videos and screencasts, access the excellent TED talks perhaps, where you can find people conversing in this new language, about these new technologies.

2. Comments and contributions

Once you've found the conversations, you can enter into them. You can comment on blog posts. You can Skype into webcasts live, you can join live presentations where you can speak with presenters and others in the orbit around them. You can enroll in free courses, you can participate in

listservs, you can find and absorb the culture of the conversations you are entering into, and as you become more at ease with that culture, you can join in the conversation, reflect on them, and share your reflections with your growing network.

3. Creation of content

That's the last step: contributing to that culture, to the content available to the community or to the network. You can recycle some of what you are learning, remix or add value to it. You can create blog posts, reflect on your learning, suggest your insights to others, tag posts in delicious or diigo, share with your community. Some go on to set up their own webcasts, or share their insights on Twitter, or Facebook, which Michael Coghlan claims is where his network is moving, where he keeps on top of not just family and friends, but his learning and re-learning.

When you are at that stage you might start to see how this can be done with students. You might start to see how you can create a portal and store it online and link from there to the places you would like for your students to visit to help guide them along their path to autonomy, where they might do the same thing with the work they want to show to you and to the world. You might see how to encourage them to not only access but also interact with and create learning objects along that path. What they create can be shared with one another and linked to an e-portfolio that could augment or replace your current evaluation scheme ... eventually, it doesn't have to get that complicated right away, let's take our time ... start them the way you did, have them read some blogs, maybe use feed readers to follow blogs and podcasts, organize their links in a cloud-based and tag-based system. Have them consider how they can develop a learning network, and reflect on how they can benefit from that.

Where I work I'm doing this with teachers now. Here's what we've done:

- I developed curriculum which my colleagues have taught explaining essential concepts to students: e.g. Delicious, Google Docs, creative commons, and Internet search 'beyond Google'.
  - I've shared those materials here: http://issuu.com/vances/docs/social_networking_2009_lessons1-3

- I am teaching courses where teachers can learn about Web 2.0 tools through using them, and again I've shared them here:

  - http://goodbyegutenberg.pbworks.com

  - http://tinyurl.com/21centuryskills4pdo

- I am writing curriculum for language learners for the coming semester where they will learn about Delicious, Google Docs, and Internet search 'beyond Google'. Of course, when I create them, I will share them here. I

hope you'll give us feedback on all these materials (you can comment on most of them, or Tweet about them).

On arrival in Sao Paulo for the BrazTESOL conference, I did a Twitter search on the BrazTESOL hash tag #braztesol10 and I discovered that a number of people were tweeting on that tag, among them Willy Cardos0 who left a blog post entitled "Chaos, Complexity, and a Bunch of Questions," http://authenticteaching.wordpress.com/2010/07/18/chaos-complexity/,

The questions were posed in a hefty passage which Cardoso quoted, and which I have reproduced here:

"What if applied linguists should be seeking to explain how language learners increase their participation in a second language community rather than, or in addition to, how they acquire the language of the community?

"What if learning another language is a matter not only of learning conventions, but also of innovation, of creation as much or more than reproduction? It would follow that teaching should not be characterized as helping students develop the same mental model of language that the teacher possesses, even if this were possible, because such a view would encourage the teaching of conformity to uniformity.

"What if absolutist prescriptions and proscriptions about teaching are doomed to fail because they do not take into account the organic nature of change and the fact that pedagogic interventions are more valuable when they are adaptable, rather than expected to sustain standardization? If, instead, for example, we see learners and teachers as continually adapting to what others in the classroom do, then we have new ways of understanding why certain teaching interventions may fail and of developing better ones." (Larsen-Freeman and Lynne, 2008)

I like this passage in part because it seems to support what I'm getting at here. Though Cardoso was not blogging about technology, the passage relates to language learning the concepts for re-learning how to learn that have been discussed in this article. It embraces change because there is more to learning, in particular language learning, than meets the eye. In other words, language teachers need to look beyond what it appears on the surface is happening between them and the learner and consider the bigger picture, such as ways in which technology fosters connections with communities and networks that humanize rather than isolate to strengthen individuals as an integral part of modern society and how that society acculturates, or learns together.

The passage acknowledges that teaching is best done not from a position where the teacher appears to know everything and convey it to the students, but where teachers model to students how to learn, by taking advantage of what Zittrain calls the generative Web, and what I call thinking SMALL, or replacing

our notion of CALL (Computer-Assisted Language Learning) with Social Media Assisted Language Learning.

I encourage colleagues to think SMALL because in my view the computer is no longer the salient aspect of technology. The salient aspect is the use to which technology is put, and the salient use is to re-wire and expand how we are able to learn by enabling us to nurture and participate in always-on PLNs, or Personal Learning Networks.

Conclusion

Web 2.0 is the driving force for technology to be applied in constructivist and connectivist models of learning. Such tools can enable learners to leave artifacts online where other learners can find and interact with them, intrinsically motivating students to produce quality work in response to a palpable awareness of audience.

When teachers grasp new concepts such as tagging and RSS they are then in position to empower students to move away from the old ways of information dissemination to find one another online, themselves control this interaction, and utilize it in their learning. In order for teachers to grasp the fundamentals of applying technology to transformative learning outcomes, practice with peers is necessary, where teachers themselves become mentors for one another while sharing with one another their discoveries and experiences with their own learning.

This article suggests ways that teachers can develop their own personal learning networks to ensure their continuous lifelong learning, and cultivate 'teacher autonomy' (Stevens,2007), where the teachers are in their roles by virtue of being 'master learners.' Too often teachers are put in situations which are labeled professional development but which in reality are (a) driven top-down, (b) don't address teacher needs, and (c) do not lead to development. Teachers who drive their own professional development through participation in PLNs constantly express and assess each other's needs, and promote professional development on an as-needed basis, from where it is only a short leap to applying it to students.

Using technology is less about interfaces and settings than about having a theory of learning, and adapting technology tools to foster development in a subject matter in ways commensurate with that model of learning. Used correctly, technology can greatly facilitate the process of language learning; incorrectly it can be an obstacle. Correct use requires that teachers understand the paradigm shifts mentioned above in order to apply them in transformative ways to students.

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