I found Chickering and Gamson's (1987) Seven Principles resonate very closely with the research-based Best Practices that our District and schools in the NWT have been implementing K-12 over the past six years. Now our goal is to integrate technology to support these best practices in the classroom. This will require instructional and institutional planning and decisions, and although I feel all components of The SECTIONS Model of Bates and Poole (2003) can provide some very clear guidelines for this process, I will focus on two immediate concerns – 'Ease of Use' and 'Organizational Issues'.

Ease of Use:
If the central goal is to use technology to support good pedagogical practice then we don't want teachers spending more of their time "learning how to use educational technologies or on making the technologies work." (p.87) Unfortunately this describes our situation quite well at this point!
First, we have addressed these issues of reliability, ease of maintenance and stability by upgrading most of our technology - new computers in the computer lab, high school student laptops, Smartboards in several classrooms, and a new server on site. We are moving to uniform commercial software across the Board and eventually across the NWT in the education sector.

1) "How intuitively easy to use is the technology by both students and teachers?" Much of the technology we have to support learning is widely used and straightforward – Smartboards, webquests, blogs, wikis, and on-line resources but the issue is staff comfort and skill level with the technologies and software. We need to bring students and staff to a basic level of technological literacy. So staff training and support through the district, in addition to a 'learning community' of teachers in the district with similar needs guided by 'more knowledgeable' staff members is needed.

2) Adequate technical and professional support? Although the local Board and ECE are supporting this technology initiative, in-person technical support from the Board is only a few times a year. We will need to support local teachers to train as tech specialists to help teachers at the school level.
Right now it is individual teachers who take on responsibility for designing and creating technology based teaching resources and put in a great deal of extra time. In terms of planning to use the technology wisely, facilitating professional learning communities of teachers who can connect through synchronous or asynchronous tools to work together to design modules and lessons that can be shared across the board would be a good first step. We are also working on generating essential learning outcomes for every subject and grade in our Board which could really support consistent curriculum and assessment design.

Organizational Issues:
 The authors point out that "technology-based teaching needs an effective organizational system to make it feasible and practical." (p.102) Yes indeed, and this is

our struggle as we make this transition. Technology integration is certainly being supported by Education personnel in the government. But at the local level we still need to see the training and infrastructure investments that will make this work for teachers. I can maintain the network, fix printers, give advice on technology issues, but as the administrator I have so many other things to do that I cannot dedicate the time required. The need for a dedicated tech position (even PT) needs to be recognized in funding formulas, as well as collaboration time and resources for teachers to design good course materials. ECE has started to design some great technology-based courses but for many communities what is needed is an actual financial investment in expanded bandwidth so students can make use of these great technologies!

References

Bates A. W. & Poole, G. (2003).A Framework for Selecting and Using Technology. In A.W. Bates & G. Poole, Effective Teaching with Technology in Higher Education (pp. 75-108). San Francisco: Jossey-Bass. Retrieved January 6, 2012.

Chickering, A.W. & Gamson, Z.F. (1987). Seven Principles for Good Practice in Undergraduate Education. American Association for Higher Education Bulletin, 39 (7), 3-7. Retrieved January 7, 2012 from:
 http://www.aahea.org/bulletins/articles/sevenprinciples1987.htm

Subject: Is SECTIONS is missing another S?

Topic: Applying the Frameworks

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Date: January 10, 2012 8:38 PM

As the coordinator of the ESL (English as a Second Language) "TAL" Technology Assisted Learning Program with our company, I have often looked to the SECTIONS framework to guide our online teaching model.

While I could cite examples from every aspect of SECTIONS based on our work, the primary area of digital development I would like to develop is the T in teaching and I in Interaction and Interactivity.

After each lesson,the ESL team goes over what went well and what we need to work on - from every angle. The most frustrating aspect of "teaching" online to ESL students, is the lack of communication and feedback from our students. However, while we struggled with the pedagogical reality of, "Are these students learning anything?". We have had to contemplate skills,

content and outcomes from a variety of different perspectives.

We eventually realized that learning is not just about "skills". Online learning has offered these students a glimpse at a "different" way of teaching- as well as developed their language skills. Not only do we use experiential learning and theme based language learning, we offer the introduction to Canadian teachers who care. Caring means asking for opinions and getting to know the students as individuals and trying to facilitate the concept of being accountable for your own learning. But most importantly, caring means challenging the students to do their best in a variety of different ways.

These two aspects of SECTIONS have been a huge challenge for my team as professionals and as learners, because of all the underlying issues that affect the teaching and interaction - culture, technology issues, administration at the home school, teaching ability/comfort, firewalls, trying to get to know students and the list goes on....It made me wonder if I was missing something?

Based on the Bates and Poole reading, I would suggest another letter - S for Steps and Strategy.

After identifying the 8 pieces of SECTIONS, I believe an educator/administrator/team needs to start a "strategic plan" on the STEPS to technology implementation in education. (STEPS could stand for Strategy to Enlighten People Slowly). By jumping in with amazing software and great teachers - we were still unable to really connect and engage with the students. SECTIONS is a guideline to ensure the "possibility" of technology integration. STEPS offers the missing piece - the plan on how you are going to get there. The preparation and examination of how the SECTIONS pieces need to work together.

I really like this article from teAchnology http://www.teach-nology.com/teachers/educational_technology/evaluation/

I think that Bates and Poole sets the guidelines for integrating technology, however this article (and others like it) encourage the STEPS concept as well. Goal setting, contrasting students

before and after the integrating of technology, collecting and analyzing the data and using rubrics to evaluate goals are all examples of ways to take the first steps.

Honestly, I believe that all aspects are equally important in SECTIONS. It was created based on a systems thinking approach - so one aspect is dependent on the other. After taking the time to begin our "new" online model, I look forward to learning about new teaching and interaction opportunities and ideas to create a new strategy for my team based on the SECTIONS ideas.