

Week 1- Introduction to ID

My name is Kenneth Kim. Being self-taught in technology, I wanted to bring more to the table other than what I learned from books and the net. This was primarily the reason why I decided to pursue my masters.

Just like Karen, I started this program in the summer of 2002. In fact, Karen was my very first online partner in a collaborative project. However, I worked a little harder than Karen and am in my last course;). I am writing my exit document in addition to this class. As educational technology has a whole lot to do with ID, this course will help to solidify my understanding of this topic.

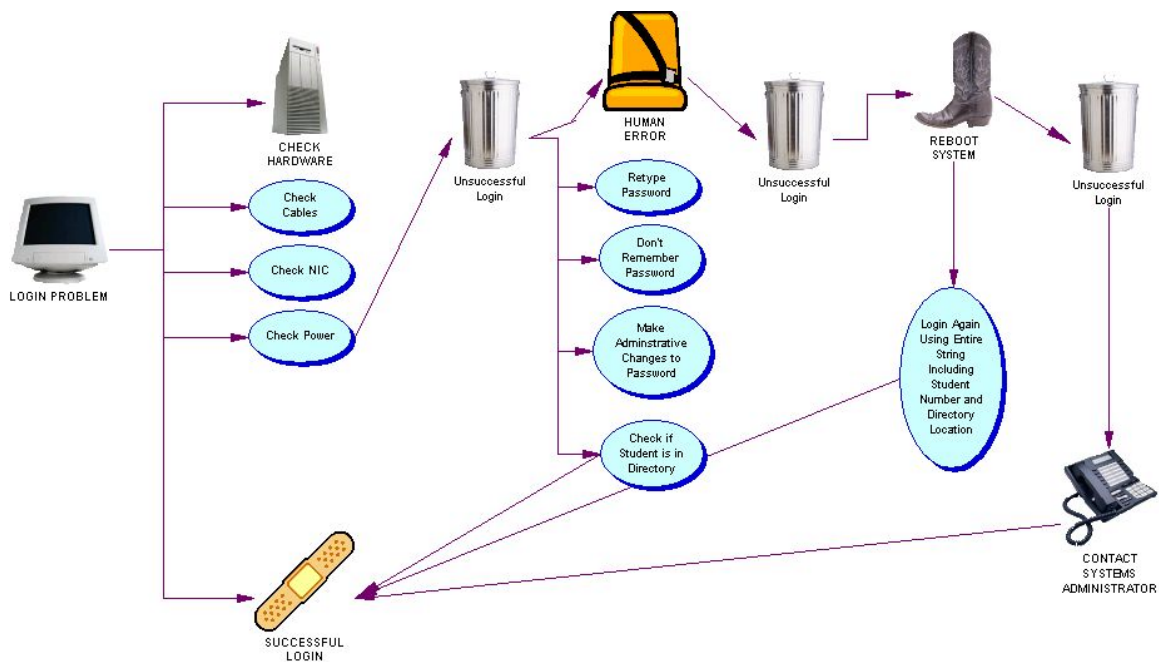
I teach IT at a secondary school in West Vancouver. I coach football, basketball, and golf as well as supervising our school web site and advising on the yearbook. In my spare time, I try to spend quality time with my family which includes taking out the garbage and changing diapers;0

Kids wear peanut butter better on their faces and clothes than adults do. With that said, I still enjoy the occasional gorging of this comfort food.

Causal Loop Diagram

In the process of creating this causal loop diagram, I found that it solidified my understanding of how to perform the task effectively and efficiently. At the beginning of each school year, I run into the same problems with students having difficulty logging in. As my school is on a network, students need to be able to log in order to use the computers. As I am an IT teacher, this task is critical for me to teach. Having been a teacher for seven years now, the process of troubleshooting computer problems has become ingrained in my head. However, for a teacher who is new to a lab environment, this would not be comfortable task. This diagram breaks down the complexity of the tasks and in essence takes the user sequentially through each of the steps. This allows the user to learn and retain the knowledge better.

Creating this diagram was not difficult, as I have done it numerous times. However, in looking back at the diagram, I suppose that there is probably more information that can be put in for each of the steps. For example, checking cables means more to diagram creator than the reader. This might mean checking the keyboard, mouse, network, and serial connectors. Therefore, the complexity of the task can also be drawn out more and more. For those who put together how-to manuals, I applaud them because it would frustrate the heck out of me. How complex do we need to put it for everyone to understand? For those who have trouble putting together IKEA furniture, it is probably not your fault as many of us do have trouble interpreting 'insert Screw A in Hole A'. It is the designers who didn't realize in their needs assessment that there are people out there that are that utterly inept. The technique of causal loop diagramming allows instructional designers to find the performance gaps (Should – Is – Cause – Gaps – Good Performance) in order to create good performance.



Responses

Stephen, way to go to get things rolling.

Your find your statement 'By having a subject matter expert (SME) outline a process in this manner, I think it would be much easier to start planning training' interesting.

With an (SME) controlling the process, it would illuminate on what is the most efficient practice. However, for a novice, a single step could comprise of 5 steps. For an experienced mother who is an expert at breastfeeding. It might mean putting the nipple to the baby's mouth. For a novice mother, this might mean a half a dozen preparatory things before this event even happens. These variables depend on the audience. So the question is 'Do we always use the process of an SME to get to the best ID?'

Interesting challenge.

There are two levels of people who needs to buy into this learning. One is the decision makers and the other are the learners. As Werry (2001)emphasize, online entrepreneurs tailor their messages when talking to these two groups. When they speak to the administrators, they usually stress the savings that will be made and the increase in efficiency and flexibility. When speaking to faculty 'learner', "a very different tone is registered, one of which community tends to be the central motif" (Werry, 2001). My take on this is will an online model be the answer or will a blended learning model (a mix of face to face and online classes) be more appropriate in this situation.

Reference:

Werry, C. (2001). *The Work of Education in the Age of E-College*. Retrieved September 12, 2003 from http://www.firstmonday.dk/issues6_5/werry/index.html

Karen, good point. '...it important in the communication component of ID to make sure it works for the clients as well.'

With all the terminology used in ID, it is important that instructional designers communicate their assessment in a simple yet understandable manner in order to maintain a partnership with the client. We must keep in mind that the consultant is the influencer and the client is the decision maker. In the realm of thing, it is the client who will be spending the money. Using a causal loop would shed light on what processes are occurring in the organization that might need to be inspected closer without going all crazy with the terminology that experts love to use to tell others how intelligent they are.

Week 2 - Performance Problems and HPT

Looking at both models (Gilberts, 1976 & Mager & Pipes, 1984), it seems that the four things that are most important in performance analysis is described by (Blanchard, K, Robinsion, D., & Robinson, J., 2003). They are:

Go for the 'SHOULD'S'
Analyze the 'IS'
Pin down the 'CAUSES'
Select the right 'SOLUTIONS'

Ken Blanchard, the co-author (more branding than anything, but he did write the introduction) of this book, has written countless books on performance on the job. He is also author of the best seller, 'The One-Minute Manager'. This book describes a performance issue and takes the reader through each of its parts using the GAPS analysis in story form.

In my current situation, athletics is an integral part of a school. However, in recent years, due to budget cutbacks, new government policy initiatives, and reorganization of the school, which has added two senior grades (11 & 12), many teachers have opted not to participate in coaching. The effect of the current reform is that it has increased class size, increased preps, pitched teachers against one another, lowered morale, and lowered teacher involvement in extracurricular. More importantly, it has also put a damper on school culture. From the teacher's point of view, when class size is increased, it creates the need to change pedagogy and increase efficiency or otherwise suffer the health consequences. In fact, some teachers have over 200 students as part of their assignment. This is the 'IS' part of the GAPS analysis.

What 'SHOULD' be happening at my school is that there should be a coach for every major sport offered by the local school athletic association. The 'CAUSE' of performance problem reaches far into the organization. As discussed previously, reform in the education system has been the barrier to this performance problem. Teacher motivation is also something that stem from this. However, the problem could be improved with a few things. Restructuring of the entire education system would obviously not be an option; therefore, an in-house reorganization would seem the most feasible. Through data measurement, we could probably find out more associated with the performance problem. In the short term, the enablers that would kick-start the athletic program is to instill a climate of pride and collegiality. Teachers would benefit by working with each other and decrease the amount of time spent coaching. In building a competitive athletic program, it puts 'fire in the belly' of those sitting on the sidelines to do something. Establishing some sort of incentive would be a start to re-building. Recognizing and celebrating with those who put in the effort would build staff morale. From there, a long-term plan should be developed. However, selecting the 'SOLUTIONS' would be determined by the data measurement.

Blanchard, K. & Robinson, D. & Robinson, J. (2003). *Zap the Gaps: Target Higher Performance and Achieve It!* New York: HarperCollins Publishers Inc.

Having been a coach for a while. Here are my perspectives:

It is an unwritten rule that for every two PE blocks a teacher teaches, he / she should be coaching one season.

However, teaching and society as a whole is different. Now days, teachers have more preps, more students, and more demanding parents. For a young family, it would be hard to justify to spending 5 days a week from 3 pm to 6 pm coaching kids. This is what happens in competitive sports like football. Even with many senior sports such as basketball, this might mean staying at the school until 8 pm in order to have available gym time. For those who live outside the school district, this would mean that they would either stay at the school or commute home and again. This adds to their inconvenience.

Societal changes have also added to the demands of families. Many two-income families are dependent on each other for scheduling pickup of their kids from daycare and school. Some are juggling schedules so that they are not dependent on daycare which means when one parent comes home the other goes to work. Adding to this, do we really want our kids spending time with an unfamiliar caretaker from 7:30 in the morning until 5:30 at night?

Teachers choose teaching for its humanistic elements. Many teachers could probably get a higher paying job elsewhere; however, they choose it because of the lifestyle it offers. With added pressures of the policy reforms, teachers are no longer motivated in pursuing coaching while at the same time risking their health and lifestyle. With no benefits in

sight, many have opted out. Those who remain are the one who live to coach. They should be congratulated. However, for those who don't, schools should not be guilt-tripping teachers. It is their choice not an obligation to coach.

Week 3 - Models of Instructional Systems Development (ISD)

Dear Editor:

As reader of your weekly column, I wanted to comment on your statement that stated that online ISD models are different than ISD models targeted at designing face-to-face instruction.

In education, the process involved in the development of an instructional design model utilizes learning and instructional theory to create an efficient learning environment. Instructional design involves the systematic process of translating principles of learning and instruction into plans for instructional materials and activities. "The model should be flexible, adaptive to change, and outcome based. When all these components are present, it allows the model to be more dynamic, responsive, and rapid. However, in any model of design whether it is online or face-to-face, the learner should be at the core of the instructional design model because according to both the behaviourist and cognitive approaches, the metaphor for the learning has the student acting as the designer (Gros, 2001).

There are countless numbers of instructional design models. The reason this is the case is because there is no one model that fits all approaches. However, what remains the same is that in both design contexts the learner is still the most important designing factor. The models that are used most frequently are flexible to "account for various classroom situations and are explicit to the context they apply" (Gustafson & Branch, 1997). Tapscott (1998) outlines eight shifts he believes instructors and students need to make if they want a more powerful and effective learning paradigm. These shifts are from linear to hypermedia learning, from instruction to construction and discovery, from teacher-centered to learner-centered education, from absorbing material to learning how to navigate and how to learn, from school to lifelong learning, from one size fits all to customized learning, from learning as torture to learning as fun, and from teacher as a transmitter to a teacher as a facilitator (cited in Reid, 2002, p.3).

I don't agree that at the core of the design that they are any different even though the contexts are. Many aspects of this design would apply in both an online or face-to-face instructional design model. Online ISD models are no different than face-to-face ISD models as they both have the same goal of how to effectively structure a design for maximum learning impact.

Sincerely,

Incessant S*** Disturber

Resources

- Gros, B. (2001). *Constructivism and Designing Virtual Learning Environments*. Washington, DC: Eric Clearinghouse on Information and Technology.
- Gustafson, K.L. & Branch, R. M. (1997). *Revising Models of Instructional Development*. *Educational Technology*. Research and Development, 45(3), p.73-89.
- Reid, S. (2002). *Teachers' Views on Technology and the Future of Teaching*. *International Electronic Journal for Leadership in Learning*, 6(21), p.1-12. Retrieved September 3, 2003 from <http://www.ucalgary.ca/~iejll/volume6/sreid.html>
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Hi everyone:

As a student having gone through many of these courses, I have seen many online designs. Most of these designs promoted a self-responsibility to learn and to share. Some were contract based others more strict in its design. However, the commonality that each of them shared was that there was material that needed to be read, synthesized, shared, written, and then evaluated. This is similar to face-to-face classes. However, with technology, meeting face to face was eliminated which creates a need to 'work through' the information through discussion in a collaborative online community. As many courses also required group projects, partnerships had to be formed and dissolved similar to face-to-face encounters. Online designs are merely a tit for tat mirage of a face-to-face design.

A design, which I have been looking, at most recently is the blended model. Blended learning is not a new approach. Blended learning is a mix of self-study and human interaction. It is a learning solution that includes face-to-face, live e-learning, and self-paced learning (Valiathan, 2002). Driscoll (2002) determined that blended learning involves four concepts:

1. To combine or mix modes of web-based technology (e.g. live virtual classroom, self-paced instruction, collaborative learning, streaming video, audio, and text) to accomplish an educational goal.
2. To combine various pedagogical approaches (e.g. Constructivism, Behaviorism, Cognitivism) to produce an optimal learning outcome with or without instructional technology.
3. To combine any form of instructional technology (e.g. videotape, CD-ROM, web-based training, film) with face-to-face instructor-led training.
4. To mix or combine instructional technology with actual job tasks in order to create a harmonious effect of learning and working.

As a designer and a student who has learned in both of these environments, I find this approach more in line with the economics of the time and more humanistic. Moreover, as it involves a crossover between the two mediums. It allows us to learn in more than one way and is not self-directed. Blended learning allows greater engagement with the learner it allows a good balance between face-to-face and online (Kettleborough, 2002). Many of you will probably succumb to the evils of technology ('computer vision syndrome' 'stiff neck syndrome') during the course of your journey in the MED program and will realize that a strict online design is not healthy.

Resources:

Driscoll, M. (2002). Blended Learning: Let Get Beyond the Hype. Retrieved September 24, 2003 from [http://www3.ibm.com/software/mindspan/distlrng.nsf/0/20630ec43b8dbb4985256b810060561e/\\$FILE/Blended Learning Feb 2002.pdf](http://www3.ibm.com/software/mindspan/distlrng.nsf/0/20630ec43b8dbb4985256b810060561e/$FILE/Blended%20Learning%20Feb%202002.pdf)

Kettleborough, J. (2002). Blended Learning; Fad, Fantasy, or Learning? Retrieved September 24, 2003 from http://www.corollis.com/article_blended.htm

Valiathan, P. (2002). Designing a Blended Learning Solution. Retrieved September 23, 2003 from <http://www.ksb.niit.com/content/resources/pdf/Designing%20a%20Blended%20Learning%20Solution.pdf>

Liked how you armed yourself with graphics to illustrate your point. Must have learned this strategy in Lesson 1;)

Most of us have pointed to 'flexibility' to being the key to design. As designers, this flexibility is the key to configuration and re-configuration of the landscape at the time. The static linear designs that once worked with traditional teaching is no longer effective in a 'learner centered' classrooms. Just as the world outside of education has shifted from a static, simple traditional world of work to one that is uncertain, indeterminate, and unpredictable. We have also seen this in the world of education. Education is no longer prefigured, it is configured, dynamic, and requires problem solving as work evolves (Hammond-Kaarremmaa, 2003, p.8). When technology is added to the mix, instructional design requires an even more dynamic approach as it add another dimension. The function of instructional design is more of an application of theory, rather than a theory itself (Mergel, 1998). Designs that are context specific and learner specific will use an eclectic approach, assimilating a broad range of instructional theories and principles.

Just look at the last few weeks in this course. Elizabeth's actions as a facilitator and a designer in eliminating weekly assignments to one item was probably a good move as the discussion have been lively and in the 'hundreds'. In an online as well as a face-to-face context, this moves shows how designs can be flexible depending on the landscape of the time.

Resources:

Hammond-Kaarremmaa, L. (2003). Dream Team's Roadent Model. Retrieved September 24, 2003 from <http://web.mala.bc.ca/lizhk/IDesign/isd.htm>

Mergel, B. (1998). Instructional Design and Learning Theory. Retrieved September 18, 2003 from <http://www.usask.ca/education/coursework/802papers/mergel/brenda.htm>

Glad I made sense and am twice as glad that I am finishing my MED (EdTech) with this course. This course probably encapsulates most of what I have learned in my journey. Through studying learning theories, ID, ICT leadership, ICT Pro-D, etc, this course has brought some of those important ideas back to the table.

In my research on ID, Merrill's First Principles of Instruction (2001) has made the most sense to me. He reasoned that the 'First Principles' is a prescriptive design principle on which various instructional design theories and model are in essential agreement. His article Pebble-in-the-Pond model in ID illustrates his principles within the context of a course in Excel.

Merrill agrees that design requires the identification of goals and involves a process of planning, developing, implementing, and evaluating. However, he argues that this type of detailed implementation similar to Jody's mention of the waterfall effect is not the most efficient or effective. The more significant element is the 'emphasis on the process involved in the developing of instruction rather than the basic learning principles that this process should emphasize' (Merrill, 2002).

Would like to hear your thoughts.

Resource

Merrill, D. (2002). *A Pebble-in-the-Pond Model For Instructional Design*. Retrieved September 25, 2003 from <http://www.ispi.org/pdf/Merrill.pdf>

Karen: Now I am groaning because you have labelled yourself #1.

Your thoughts on blended learning are valid. The target population and their preferences dictate the balance in the blended learning. Nevertheless, these are two essential elements that designers must keep in mind. The first is what the target population needs to learn as not all subjects are well served by an online component. The second is the learning styles of the population (Elfstrom, 2002). Blended learning requires computer skills in using a browser and basic software applications. Because online learning is text heavy, the target population must also be able to read, write, and type (Elfstrom, 2002).

For schools that are experiencing a shortage of classrooms and for commuter schools, a blended solution works in their benefits as it has the potential to reduce costs and to save people time and money. For adult learners, this also might be a great way to diversify their skills. Your dilemma in not being able to get as much from one component as the other says a great deal about yourself as a learner. You are very conscientious and meticulous. For myself, I find with one component especially online, it does not fulfill my learning needs because there is probably a lot more I could say to you right now, but my thoughts comes out faster than my typing. As a learning model with the right balance, blended learning can cater to both our needs.

Resource:

Elfstrom, K. (2002). Blended Learning. Retrieved September 23, 2003 from
http://www.psi-performance.com/resources/article_09.html

Week 4 - Needs Assessment

Last year, my school completed a school wide survey to inquire how and when students learned best. A nineteen-question survey was created to determine the time, place, and the circumstances of their study. 529 students out of 750 students completed the survey online (<http://www.getfast.ca>). This was a large-scale survey and was well received by the staff and administrators. The purpose was threefold. It serves as a baseline data for assessing our school population. Second, it provides parents and staff with direction on student needs. Third, it allows the staff to formulate recommendations towards our yearly school goals, and school and district vision. The survey itself had some bias to it. The issue at the time was how the timetable was laid out. Many of the staff were vehemently against having fixed blocks for the last class of the day in a ten day rotation. Therefore, the survey was primarily set up to show everyone if this timetable had the same effect on students as it did on teachers.

We are on a different timetable this year. Although, the administration is also new, the survey results made a positive impact on changes in the school. Much of the data taken from the survey could probably be used for other purposes. However, this would take someone with more time and experience to extrapolate. The survey was multiple choice Likert scale method and the data was broken down into grades and sex. The survey gave us information about the students' study habits, their eating habits, their learning preferences in terms of time of the day, who they asked for help for homework, how often they met with tutors, how often they read, how often they used their agenda book, the amount of time spent participating in extracurricular activities, the amount of time they watched television, and the amount of the time they spent using the computer. The survey also shared their attitude towards the mark they received. These leading indicators gave us a foundation of new information to what was happening now at the school. Our next step is to look into intermediate indicators and then take the next big step of looking at trailing indicators to complete the picture. However, all this takes time and what we did last year was a step in the right direction.

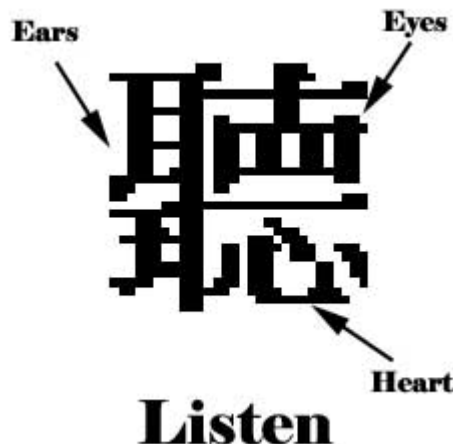
Week 5 - Communication with SME's

Communication Inventory

I mostly work in isolation in my job as a teacher. Although I try to sit down once in a while at lunch to chat with colleagues, I find that I am supervising, working out, or catching up on the day. As the only IT teacher in the school, collaboration is limited. We are, however, trying to change this climate in our Applied Skills department. Our first goal as a department is to work together in setting up an Applied Skills night to showcase our student's work and to promote our programs. We have found that with the new education reforms, students take their minimum 4 credit Fine Arts / Applied Skills elective and opt to have spares instead of taking advantage of more elective courses. Many do not realize that electives deliver a broad spectrum of skills that employers deem essential.

Today was a day of discussing with colleagues on the logistics of this day. I have learned over the years that I tune in to what I find most important and/or interesting. Most of us have sat in meetings that have been prolonged not because there was no agenda, but because there was a breakdown in communication. I listened, daydreamed a bit, listened some more, daydreamed some more... This has become my pattern of listening. I am not a very good listener. However, I am not afraid to add suggestions, crack a joke, or provide criticism. I will look into the person's eyes and tell them my exact feelings. My relationship with students is no different. I provide a humanistic element to my teaching by providing a climate where everyone can say what is on his or her mind.

The following is the Chinese character for listening. When we are truly listening, it involves more than the ears alone. The eyes and the heart work in unison as part of the process we call active listening. I still have lots to learn.



Reflection

Communication is obviously a skill that everyone needs in order to be effective in our personal and professional lives. It is no wonder there are thousand upon thousands of

books out there that touch on this topic. In the business of performance improvement, it is no different. Performance improvement requires the designer to build relationships. This involves initiating and maintaining partnerships. The skills required for this include establishing rapport, probing for answers, determining a logic flow for questions, choosing the right question to ask, providing explanations, listening actively, dealing with friction, and keeping on topic. When this is done effectively, this enables the designer to get a real sense of what really is happening. When this is not done effectively, this might mean lots of running around and frustration. Identifying the true client is also a large part in this communication, 'cat and mouse game', of exploring the situation.

Week 6 - Job and Procedural Transfer Analysis

Job Analysis

My wife is a grade 1 teacher at a Catholic School in the west side of Vancouver. Although I am elementary school trained, I still carry a misconception that grade 1 teachers are highly glorified baby-sitters. As Hunter (n.d.) points out, "the science of developing an effective instructional design not only requires looking at the learning theories, the instructional design theories, the setting, the learner, but it also requires the designer to identify his or her background and biases and how this may influence the design process" (Hunter, n.d.). So with my bias in tow, I went and investigated this a little further.

I had quickly jotted down a few questions beforehand. Being comfortable with the client 'wife no.1', I explained my task and asked if she needed any clarification. I asked if she was okay if I taped the conversation. Interesting enough, she asked if this would come back to her at a later date. Having experienced many nights in the doghouse and wanting this meeting to have a pleasant beginning, I just smiled.

The conversation flowed well. Most questions I asked led to other questions that were not thought of beforehand. I categorized the questions into classroom duties and school duties. I clarified what she said and asked a few times if this was really the case. She emphasized that basic reading and writing were skills that students were expected to leave with by grade 1 made me realize how critical her role was. In fact, according to literature, students who do not learn these two skills by grade three were prone to have problems in later years at school.

The result after sifting through the information and fast-forwarding through the audio was that I realized that my wife works a lot harder than I do in the classroom. She is a stand in mother to many young children and needs to liaison with parents on a daily basis. Just listening to her tell me this was exhausting enough. Never mind doing her job for a day. Because of the informality of the meeting, I received an abundant amount of information. From this meeting, it seems that building and maintaining a relationship is a more important aspect of finding out the nitty-gritty than being prepared with a notebook of questions.

Resources:

Hunter, W. (n.d.). *Choosing an Instructional Design – Is There a Best Method?*

Retrieved October 14, 2003 from

<http://www.acs.ucalgary.ca/~edtech/688/conclude.htm>

Week 7 - Resource and Constraint Analysis

Recently, our PAC decided to give us some funding for technology. From this, a committee was formed to look at the direction of IT at our school. Through a preliminary needs assessment, we looked at where our school was now, where we wanted to be short term and long term and how this money could be used effectively. Do we do some patch up work by buying new computers / peripherals where needed or do we form a partnership with IBM and upgrade our infrastructure to wireless? Patching up our existing computers would not meet our computers to student ratio; however, with IBM on board, students could lease laptops, which would improve our computer to student ratio as well as improve the infrastructure.

Using the system of constraint removal, the major themes emerged to what the barriers were and the risks associated with these barriers. This type of qualitative analysis gives a richer and deeper analysis to what appears on the surface to be okay, but with other factors at work might not necessarily be the best idea. Comparing the relationship of each of the themes adds depth and breadth to the entire project as it provides a more meaningful account of what is happening.

This method is missing the intangibles that might be associated with a project. With the constraint removal matrix, it only allows for four sources (competency, attitude, material, and policy). However, this method would still be useful in determining the best strategy if it came down to one against the other.

Week 8 - Media Selection

Media are products we choose to use to make our lives easier. For teachers, the selection of media is done to create an environment to improve learning. Media selected should engage students and offer something that traditional learning does not.

In my work, project-based multimedia learning is designed to allow students to acquire new knowledge and skills in the course of designing, planning, and producing a multimedia product such as text, graphics, video, animation, and sound to convey their understanding. As students design and research their projects, instead of gathering only written notes, they also gather and create pictures, video clips, recordings, and other multimedia objects that will later serve as the raw material for the final product. With this, students do not learn simply by using multimedia produced by others, rather they learn by creating it themselves.

The role of media seeks to connect students' work in school with the wider world in which the students live. It is not a one-shot lesson, but extends over a significant period of time. Students experience a succession of challenges that culminates in a substantial final product from which they can derive pride and a clear sense of accomplishment. Students work in teams of five or six and are involved in making separate contributions to the final work in order to have the whole to be greater than the sum of its parts. Media changes the role of teachers from being the only expert in the class to a facilitator. From the traditional sense, teachers will now have to give up control of the classroom because it is apparent that one person in the classroom is not enough anymore and that computers will open up a whole new learning environment for students (Reid, 2002, p.7). This will transform the "role of the teacher from the frumpy old role of sage on the stage for the modern role of guide on the side" (Simkins et al., 2002, p.101). Assessment will also be different as the final work will not be the only representation of the student learning. In fact, through this process, students are gaining content information, becoming better team members, solving problems, and making choices about what new information to show in their presentations. In project-based multimedia context, assessment involves activities for developing expectations, activities for improving the media products, and activities for compiling and disseminating the evidence of learning.

(Simkins et al., 2002, p.3-5)

Reid, S. (2002). *Teachers' Views on Technology and the Future of Teaching*.
International Electronic Journal for Leadership in Learning, 6(21), p.1-12.
Retrieved September 3, 2003 from
<http://www.ucalgary.ca/~iejll/volume6/sreid.html>

Simkins, M., Cole, K., Tavalin, F., & Means, B. (2002). *Increasing Student Learning Through Multimedia Projects*. Alexandria, VA: ASCD.

Responses

Interesting enough your comment "author wants to caution is to maintain our focus on course objectives which are drawn from course purpose and goal" is different from what constructivists see how learning should be applied. Creating a constructivist environment is difficult even in the best of circumstances. Applying it to instruction is even a greater challenge that involves a complex array of tasks. While constructivism does give suggestions of teaching strategies, it does not provide a framework for the design of learning opportunities for creating of an instructional plan for students (Norton & Wilburg, 2003, p.36). Furthermore, the absence of specific learning objectives and outcomes has earned the criticism of constructivism as inefficient and ineffective because they are costly to develop (Dick, 1992, cited in Tam, 2000, p.13). Without specific learning objectives, performance in a constructivist environment requires a different method of evaluation. So with this, why are so many people expounding on the virtues of constructivism in an online environment?

Tam, M. (2000). Constructivism, Instructional Design, and Technology: Implications for Transforming Distance Education. *Educational Technology & Science*, 3(2), p.1-17. Retrieved September 18, 2003 from http://ifets.ieee.org/periodical/vol_2_2000/tam.html

Norton, P. & Wiburg, K. (2003). *Teaching With Technology*. Orlando, FL: Harcourt Brace.

Hi Rose,

I must have misunderstood what you were saying. Funny how that is with online work.

What I am saying is that the constructivist approach requires assessment methods different from other approaches because goals cannot be pre-specified. However, more, importantly, the meaning of constructivism as a term has been used improperly. Merrill (1992) argues that constructivism jumbles indiscriminately ideas about teaching and ideas about learning:

"that content cannot be pre-specified because every learning task is unique; that learners learn in idiosyncratic ways; that objectives or learning outcomes are content specific; that there is no domain independent instructional strategy; that there can be no external control of the instructional events except that which the learner chooses; that there can be no isolated tasks, only real world tasks; that there can be no simplification of content; that content cannot be separated from use; that the teacher must model the process, but must not be scripted; and that there must always be alternative views.

(Merrill, 1992, cited in Boethel & Dimock, 1999)

Constructivism is a learning theory and should not be confused with its application to teaching. However, often these two distinct elements are confused for one another. The idea of moving from constructivist learning theory to constructivist approach to instruction requires more than giving students sufficient time to work collaboratively with their peers to construct knowledge through authentic real-world problems. It requires a new way of learning and teaching.

Boethel, M. & Dimock, V. (1999). *Constructing Knowledge with Technology*. Retrieved October 18, 2003 from <http://www.sedl.org/pubs/tec27/nonflash.html>

I agree with your statement, "my main concern is with the dollars (many!) spent on ensuring that our classrooms have advanced levels of technology in the form of computers" indicating that our school board places a lot of value in this medium."

However, now with limited funding and the 'true cost of ownership' (hardware, PD, software, support, cost of replacement, connectivity), technology is no longer in the forefront. The question now is how has learning changed as the result of all these expensive boxes?

A school wired for technology was the vision when my school was first built. As the school population expanded, technology was dumped to the side. With accountability being stressed, it was more prudent to create chemistry labs rather than computer labs. Results in chemistry exams can be measured. Seven years later, our budget is stretched to max and the question that arises when we ask for more money to support technology is how does it improve learning?

The true cost of ownership was never in the minds of these vision makers. For them, having the glitzy, dazzling, state of the art technology, which was the thing of the time, was more important than the pedagogy that is required to use it or the manpower needed to support it.

I am interested to know how you would integrate two computers into a classroom in order to use them effectively. Does anyone have research to support this or is it more viable to have a cart with a bunch of wireless ready laptops to be available to everyone's disposal? With the cost of building a lab of 30 networked computers at a cost of \$40,000 (equipment / wiring), I am not surprised that most school would choose this the other alternatives. As a school, we are in the midst of deciding on our vision of how to spend our money on media more effectively. We want to limit risks and maximize opportunities. We are emphasizing care, discernment, frugality, and scepticism. We are shrugging off the pressures for one-on-one computing and just-in-case computing and embracing the just-in-time computing where it is okay to move equipment, share equipment, bring it into a room when we need it, and move it out when we do not need it.

Mackenzie, J. Educational Technology for Engaged Learning. Retrieved November 3, 2003 from <http://www.fno.org>

Week 9 - Evaluation

The one-day PD workshop would have four components based on a blended learning model. There is a web-based delivery where web pages are 'pushed' to the learners. The web pages contain base information and procedures on how to conduct a parent-teacher interview. The face-to-face component builds on this knowledge. Through social interaction, the beginning teachers create understanding through collaborative work (i.e. role play, etc...). The formative evaluation begins with walk-around. The designers walk around while the teachers work, talk to them about what they are doing, ask them hard questions about why they are doing what they are doing, and take time to explain their difficulties. Through this investigative work, the designer will have an understanding if the base information and procedures are put into practice. The creating deliverables component involves getting every beginning teacher to practice different

scenarios. These presentations can be assessed by participants in the class and by other experienced teachers in the district (exemplary performers). If there is a sticking point in the understanding, this should be discussed and worked through as a large group. The fourth component involves grouping the beginning teachers in 'work alike' groups to meet periodically after the face-to-face component. This extends the learning, shares new learning, and gives feedback on improving the process. A summative evaluation in the form of an online questionnaire is delivered as a link to the each participant by email.

Week 10 – Assessment

Dear Parents & Guardians:

The new BC graduation requirements for students graduating in 2004/2005 require students to provide a portfolio of their learning. This portfolio should demonstrate their achievement in areas such as career planning, employability skills, and personal health.

Collected evidence can include materials collected as part of a school assignment, a memo, from a teacher or letter from a community organization attesting to the student's participation, a video or photograph of the student demonstrating a skill, a document or certificate verifying the completion of a course, a verified record of hours of fitness activity outside of school, an oral report recorded on tape, a demonstration of a product or computer program developed by the student, a website designed by the student.

(BC Ministry of Education, 2003)

In your son/daughter's Information Technology class, we will be developing electronic portfolios as part of the curricular guidelines. This portfolio will be an "organized collection of complex, performance based evidence that indicates one's growth, goals, and current knowledge and skills" (Campbell, Melenyzer, Nettles, & Wyman, 2000, p.151, cited in Heath, 2002). The students select items to include in their portfolios, but also reflect on these selections. The act of reflection is a critical element of portfolio content as it further defines the portfolio as one's own (Heath, 2002). Not only does a portfolio keep a record of the student's growth, it also makes for a powerful statement of the students as learners. It allows student to students to self assess, self evaluate, and self regulate (Van Wagenen & Hibbard, 1998, p.29, cited in Heath, 2002).

The portfolio will consist of three parts. Part I will be 'What I did'. Part II will be 'What I Learned'. Part III will be 'What Will I do Next'. Part I will involve collecting and selecting artifacts to be included in the portfolio. Part II will allow students to reflect on their work. Finally, Part III will carry the reflection into the future indicating how the students will use what they know about their past performance to influence how they will continue to grow and improve (Van Wagenen & Hibbard, 1998, cited in Heath, 2002).

This portfolio will be developed during the course of the school year. If you have any concerns about this assessment, please do not hesitate to contact me. I can be reached by email or by phone at the school.

Sincerely,
Kenneth Kim

BC Ministry of Education. (2003). *The Graduation Program 2004*. Retrieved November 15, 2003 from <http://www.bced.gov.bc.ca/graduation>

Heath, M. (2002). *Electronic Portfolios for Reflective Self-Assessment*. Retrieved November 15, 2003 from <http://www.teacherlibrarian.com>

Week 11 - Course Delivery

The course option I have chosen to look at is a blended model (f2f and web/cbt). Blended learning is not a new approach. Blended learning is a mix of self-study and human interaction. It is a learning solution that includes face-to-face, live online learning, and self-paced learning (Valiathan, 2002). Driscoll (2002) determined that blended learning involves four concepts:

1. To combine or mix modes of web-based technology (e.g. live virtual classroom, self-paced instruction, collaborative learning, streaming video, audio, and text) to accomplish an educational goal.
2. To combine various pedagogical approaches (e.g. constructivism, behaviorism, cognitivism) to produce an optimal learning outcome with or without instructional technology.
3. To combine any form of instructional technology (e.g. videotape, CD-ROM, web-based training, film) with face-to-face instructor-led training.
4. To mix or combine instructional technology with actual job tasks in order to create a harmonious effect of learning and working.

There are different applications for blended learning. The blended model that I am suggesting takes an eclectic approach, which combines a project-based component within a blended model. It has four components:

1. Web-based Delivery – this is where web pages are pushed to the learner.
2. Face-to-Face Processing – information given via the web is processed and built into knowledge.
3. Creating Deliverables – the new knowledge is used to make deliverables that are served on the web.

4. Collaborative Extension of Learning – learners are grouped to meet periodically face-to-face or online. This extends learning, shares new learning, and gives feedback on improving the process.

(Barnum, 2002)

The sequencing of the elements in this model is more of an attitude driven design rather than a skills driven or a competency driven design. Attitude driven design blends collaborative learning events through instructor led sessions and learning and interactions and discussions through technology (Valiathan, 2002). Group projects, live web conferences, discussion forums, and instructor led sessions which are scheduled after learners have gone through self-paced knowledge modules are all part of the techniques used in this model (Valiathan, 2002).

The main considerations for course delivery are what people need to learn, the learning styles, the subject matter, the characteristics, and preferences of the target population. In a blended model (f2f and web/cbt), the target population must be computer literate and be comfortable using them. Older people are more reluctant to use computers compared to younger people. Finally, not all subjects should be delivered in a blended form.

Barnum, C. (2002). *Bringing Induction to the Teacher: A Blended Learning Model*.

Retrieved September 23, 2003 from

<http://www.thejournal.com/magazine/vault/articleprintversion.cfm?aid=4158>

Driscoll, M. (2002). *Blended Learning: Let's Get Beyond the Hype*. Retrieved

September 24, 2003 from [http://www-](http://www-3.ibm.com/software/mindspan/distlrng.nsf/0/20630ec43b8dbb4985256b810060561e/$FILE/Blended%20Learning%20Feb%202002.pdf)

[3.ibm.com/software/mindspan/distlrng.nsf/0/20630ec43b8dbb4985256b810060561e/\\$FILE/Blended%20Learning%20Feb%202002.pdf](http://www-3.ibm.com/software/mindspan/distlrng.nsf/0/20630ec43b8dbb4985256b810060561e/$FILE/Blended%20Learning%20Feb%202002.pdf)

Valiathan, P. (2002). *Designing a Blended Learning Solution*. Retrieved September 23, 2003 from

<http://www.ksb.niit.com/content/resources/pdf/Designing%20a%20Blended%20Learning%20Solution.pdf>

Week 12 - Project Management

Part of what I enjoy most with project management whether it is creating a school web site or publishing a school yearbook is the organization involved. Even though being organized is one of my strongest assets, it has taken me a lot of time to let things go or as Greer (2000) says, "when real world events conspire to change the plan, the project manager must make a new one to reflect the changes" (p.116). So when the superintendent decides to create a yearly plan that adds another week to Spring Break, as a yearbook advisor, I have no choice, but to reorganize the timeline to fit within the school schedule. With this, students are required to meet deadlines even though they fall within a few days after Spring Break. My role is to "transmit to the team members, a sense of urgency" (Greer, 2000, p.116). All my students know that deadlines are important because failing to meet them sets the book back and adds to our overall costs.

The motivation to meet these deadlines is also communicated to them in terms of good marks and incentive parties.

Three tips that are useful to me are:

- 1) Projects are sold and resold (Greer, 2000, p.117) - maintaining a good partnership is essential in re-evaluating the project over its lifetime
- 2) Establish indicators of success and milestones (Lane et al., 2000, p.735) - celebrate success at each stage, but also keep an eye on the main goal, 'the prize'
- 3) Plan, Plan, Plan - "planning provides the best means of avoiding pitfalls, power plays, resistance, and sudden twist and turns" (Lane et al., 2000, p.735)

Greer, M. (2000). "Chapter 6: Planning and Managing Human Performance Technology Projects." Handbook of Human Performance Technology, Jossey-Bass Publishing.

Lane, M.M., Walker, G. & Peters, M. (2000). "Chapter 35: Survival Tactics in Human Performance Technology Projects." Handbook of Human Performance Technology, Jossey-Bass Publishing.