

Module 1--Building a Theory Base
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Libr. 250--Summer 2001
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Outline of Organization

The attached pages contain my work on Module 1. Each topic is dealt with individually. The following outline was used to organize the information on each topic.

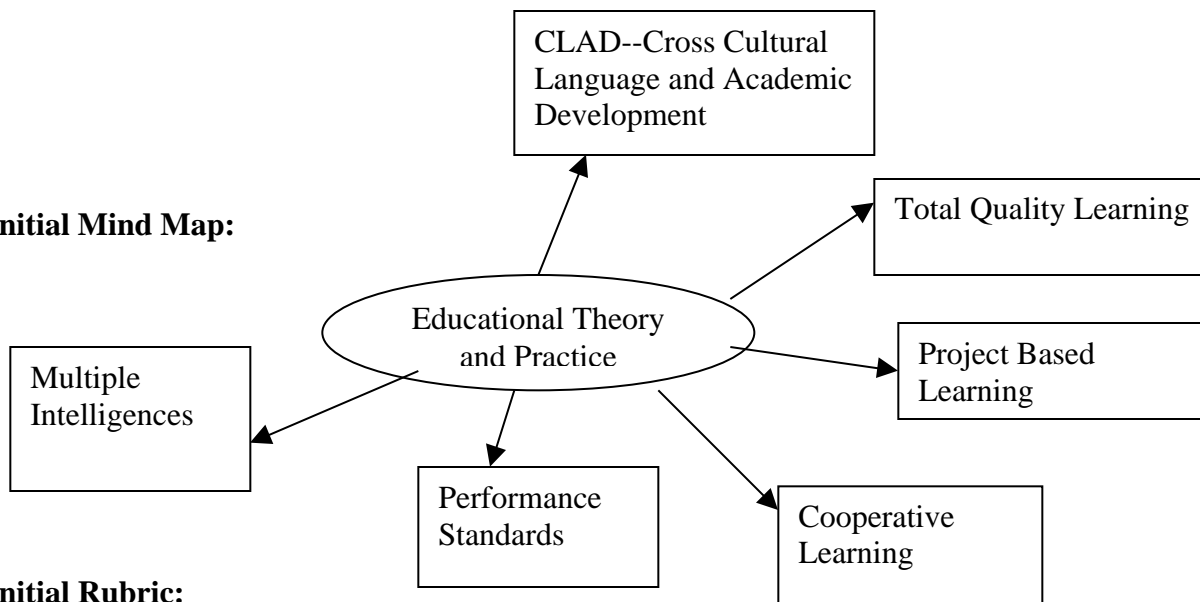
1. Initial Mind Map--This is where I was before I began reading.
2. Initial Rubric--This is where I rated myself before I began reading.
3. Notes on Readings--This is the bibliography and comments and thoughts I made as I was reading on each topic.
4. Final Mind Map--This is what I added with my reading.
5. Final Rubric--This is where I rated myself after the readings.
6. Conclusions--This is my final thoughts and summary of what I learned on each topic.

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Educational Theory and Practice

Initial Mind Map:



Initial Rubric:

Rate yourself on the following scale:

Low Expertise 1 2 3 4 5 High Expertise

Topic 1: Educational Theory and Practice

1 – F 2 – D 3 – C **4 – B** 5 – A

Notes on Readings:

Tomlinson, Carol Ann. *The Differentiated Classroom: Responding to the needs of all learners*. Association for Supervision and Curriculum Development. 1999.

This book focuses on how teachers can address the needs of a variety of learners and learning styles within one classroom. I liked the book because it recognized the fact that change is not an instantaneous process. Also, the author is realistic in recognizing that the techniques mentioned might be implemented slowly and overtime. In addition, she recognizes the fact that different techniques can be used at different times. For example, she points out that whole class lectures may serve a purpose as well as cooperative groups. An effective instructor knows how to balance a variety of different styles and won't stick to only one way of teaching.

Rose, Colin and Malcolm J. Nicholl. *Accelerated Learning for the 21st Century*. Dell Trade Paperback, 1997.

An interesting read so far on how we learn and how we need to change ideas about learning. This book has given me a lot of ideas and I've only read three chapters of it at the point that I'm writing this first reflection. I think the important part to remember is that everyone is different, but we cannot hit everyone's learning style in every teaching session. I think it's the first time I've ever had that explicitly stated in a reading on learning styles.

Some great ideas are here for techniques I can incorporate into the classroom. I never really thought of having my students brainstorm what they already know about the subject. I've got some ideas for those first few days of school where we are often times switching classes and its hard to get the ball rolling. Let's hope as I continue to read this that I will continue to find ways to improve the learning experience for my students. I wonder if most teachers are logical/mathematical and/or linguistic as their dominate strengths. I would guess that it is why they chose teaching.

The idea of non-linear note taking is an interesting one. I hadn't ever thought that way. I've been very insistent that my students take notes. However, I expect the notes to show the step-by-step process of the math. How could I change this? I need to think more on this one.

Reflection is an important part of the learning process. Yet, in the math classroom I don't usually allow time for reflection at the end of class. How can I change this? What techniques could I incorporate into the classroom? I still like the non-linear notes idea. I need to incorporate that more into my classes.

Fogarty, Robin. "Architects of the Intellect," *Educational Leadership*, vol. 57, no. 3, p. 76-78, November, 1999.

This article makes a critical point--a good teacher incorporates all of the parts of educational theory into a successful classroom. It explains the major historical developments in educational theory. What I liked most of all though is the emphasis that there isn't only one answer and that as educators we need to continue to work hard to make the learning environment rich.

Sprague, Debra and Dede, Christopher. "If I Teach This Way, Am I Doing My Job?: Constructivism in the Classroom," *Learning and Leading with Technology* vol. 27, no. 1, September, 1999.

Ok, so the math teacher gets bashed once again as doing it wrong. I get so frustrated when I read these articles about change and see the math classroom used as an example of "bad" teaching. I guess the frustration stems from having been involved in math reform since the late 1980's and knowing that mathematics educators were actually at the helm of change. However, societal pressure (political and parental!) has forced us to regress back to the more behaviorist mode. I know that the constructivist approach was working and for several years had a classroom like the one described in the math environment. However, the last 3 years has seen a retreat, at least here in California, to "traditional" methods because of the pressures of testing. This article certainly evoked some emotion!

Eastin, Delaine. "Getting to the Heart of the Matter: Education in the 21st Century" 1999 *ASCD Yearbook: Preparing Our Schools For The 21st Century*, 1999. p.13-24.

I selected this one to read because I wanted to see what was Ms. Eastin's perspective on schools. I agree with much of what she has to say, but I wish the theory met the reality. In the area of accountability, I don't see the tests that we've been administering the last 3 years as matching with the concept of students moving beyond rote skills. I wish that there was analysis and problem solving and critical thinking demonstrated on the test that makes or breaks a school's reputation. I think that the author's point that education and public education in particular is the cornerstone to our future. As educator's we need to take it one step at a time and continue to make progress the best we can.

Sistek-Chandler, Cynthia. "Journey with Jason," *Convence Magazine*, 1999.

Sounds like a great program and project. How does this work with the standards and covering curriculum to make the administration, the district and state happy? I bet there is money involved here, too. Does this limit who can participate?

"27 School Reform Models from "Tools for Schools: School Reform Models Supported by the National Institute on the Education of At-Risk Students" -- (April 1998)

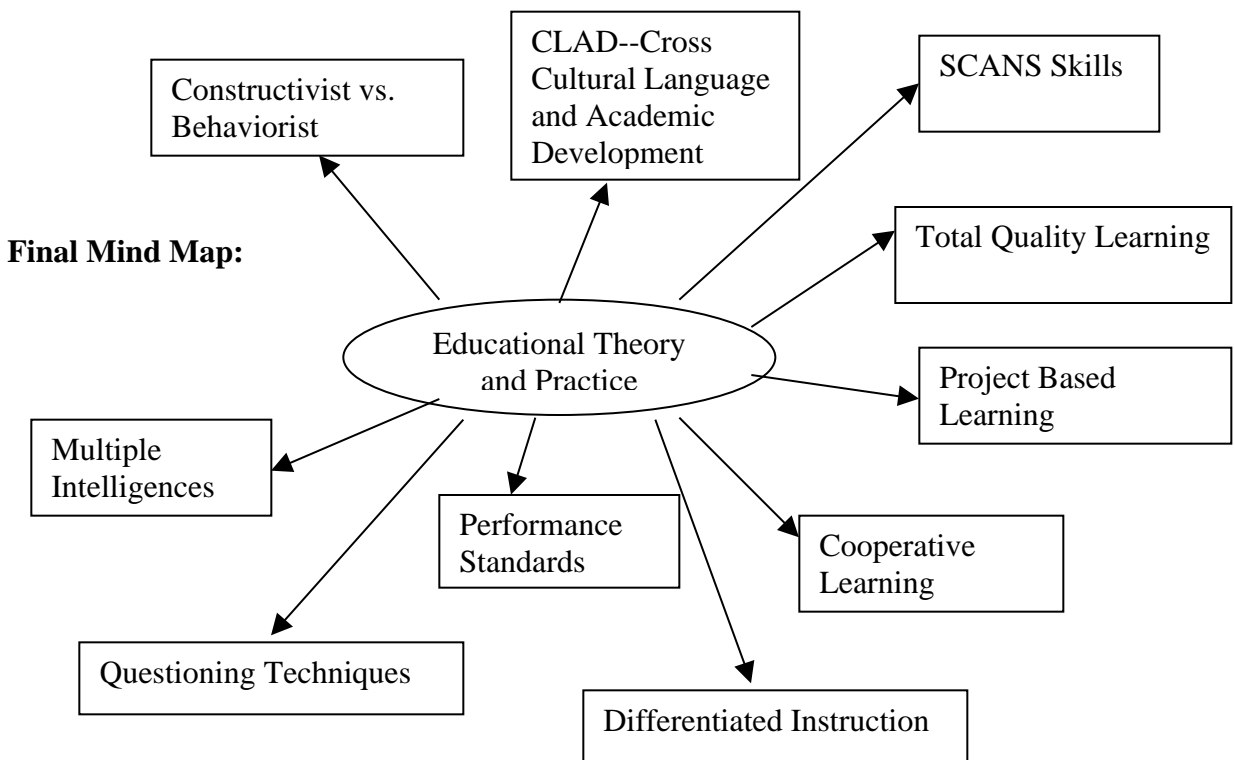
An interesting article talking about different projects used to reform schools. I have personal experience with one of the programs. AVID is used at our school and is a demonstration site for the local area. However, the perception of the entire staff towards the program is not very positive. Despite the fact that AVID is supposed to untrack students if a student doesn't measure up they are removed from the program. Thus, the statistics and performance of the students appears to be high. Of course if only the "best" are kept in the program it will appear to be very successful and a model of excellence.

Abbott, John and Terence Ryan. "Constructing Knowledge, Reconstructing Schooling," *Educational Leadership*, vol. 57, no. 3, p. 66-69, Nov. 1999.

Hmmm, the author makes an extremely valid point. We don't give teens enough credit to be independent thinkers. So often, we limit them to one particular point of view and base of knowledge and don't let them shine. The best examples of student potential I have seen have been in our magnet program. In what used to be shop courses, the instructors (both gone now, what a loss!) decided to approach learning in a constructivist way and the students would shine. Giving students their own ability to construct their own learning can be an awesome experience. How can I incorporate this??

Sistek-Chandler, Cynthia. "Mike Comberiate: NASA Brings the World to Students," *Convene Magazine*, 1999.

Another interesting idea that combines the "real world" and the academic world, but I wonder if this is only used with "select" students. My experience is that these types of programs are used with the GATE students and the mainstream student doesn't get the benefit. Since, I don't teach science I don't know that for certain, but I often find that in the attempt to meet the requirements of course work these projects are left for the students that want to do more on their own.



Final Rubric:

Rate yourself on the following scale:

Low Expertise 1 2 3 4 5 High Expertise

Topic 1: Educational Theory and Practice

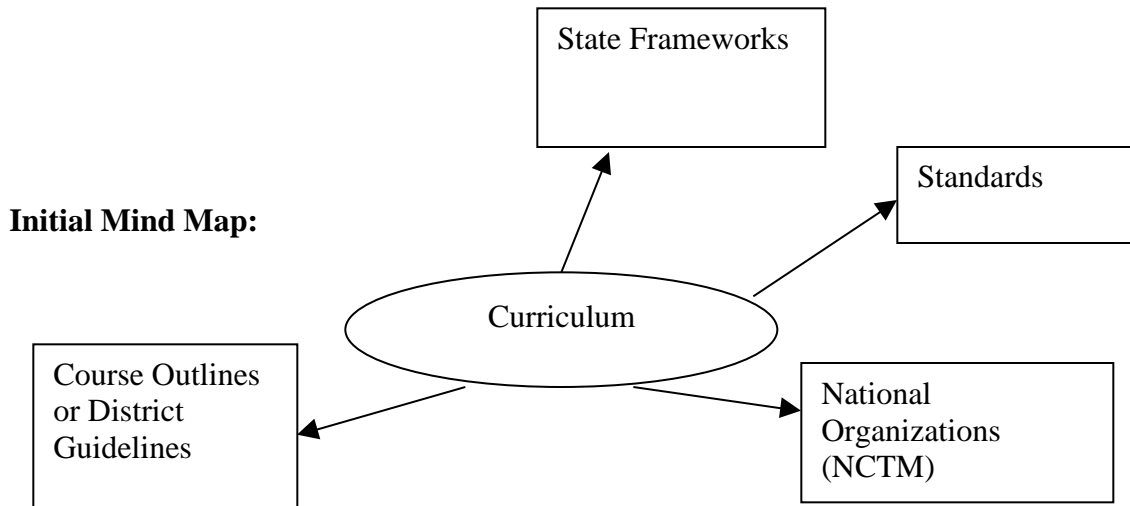
1 - F 2 - D 3 - C 4 - B 5 - A

Conclusions:

Before I began my reading, I knew the buzzwords of educational theory. I could make it sound like I knew what was happening. Before I started, I felt that I knew more than I actually did. I had read the questions that were listed for the module and could

answer most of the questions with single sentence answers. After doing my reading I have come to the conclusion that educational theory is a very complex topic. While things have changed since I began teaching in 1985, the bottom line is actually simple. Human beings are complex creatures. To be an effective educator one must work diligently to respect that complexity. In my reading of the Accelerated Learning book, this was confirmed in the chapter on multiple intelligences. "Teachers don't have to worry about identifying each individual student's preferred learning style. That would be too much to ask! Instead they should cycle through a range of activities incorporating as many of the intelligences as they possibly can." (Rose and Nicholl, 1997 p. 108) My previous experiences with workshops and training on multiple intelligences had always emphasized the need to recognize each individual student's style and try to meet it. With 150+ students I have always felt overwhelmed by such demands. One of my biggest frustrations when it comes to reading about educational theory is the lack of examples in mathematics. While many of the authors used math as the example of what is not working, they didn't give a contrasting example with math. Even in the Accelerated Learning book the authors acknowledge that math and foreign language are the two most difficult subjects for students, yet they focused on the foreign language for examples of application. Because I am currently a high school math teacher, I need more examples from my subject area of how to apply these ideas into my reality. While in the course of the readings, I have come up with some ideas of my own on how to apply the theory, it will be an experiment on my students.

Curriculum



Initial Rubric:

Rate yourself on the following scale:
Low Expertise 1 2 3 4 5 High Expertise

Topic 2: Curriculum
1 - F 2 - D 3 - C 4 - B 5 - A

Notes on Readings:

Sistek-Chandler, Cynthia. "Curriculum Integration: Not Just for Textbooks Anymore,"
Converge Magazine, September, 1999

An interesting article discusses combining technology with textbooks. The key point that the author makes that is the greatest challenge to education is the need for good teacher training. Unless the teachers are trained in how to integrate and use the technology, all the technology in the world won't make a difference

Math Archives. <http://archives.math.utk.edu/>

In exploring this site I was impressed with the wealth of information available. Most of the math websites usually point towards the Dr. Math site at Swarthmore. This had a wide variety of resources and information. It's one I will bookmark in my classroom!

National Council of Teachers of Mathematics <http://www.nctm.org/>

Since I'm a NCTM member this wasn't really new to me. The interesting thing is the differences between what the California State Framework and the NCTM Principles and Standards recommend for mathematics. The two documents have a wide gap between what students should know and be able to do.

National Science Foundation <http://www.nsf.gov/home/mps/start.htm>

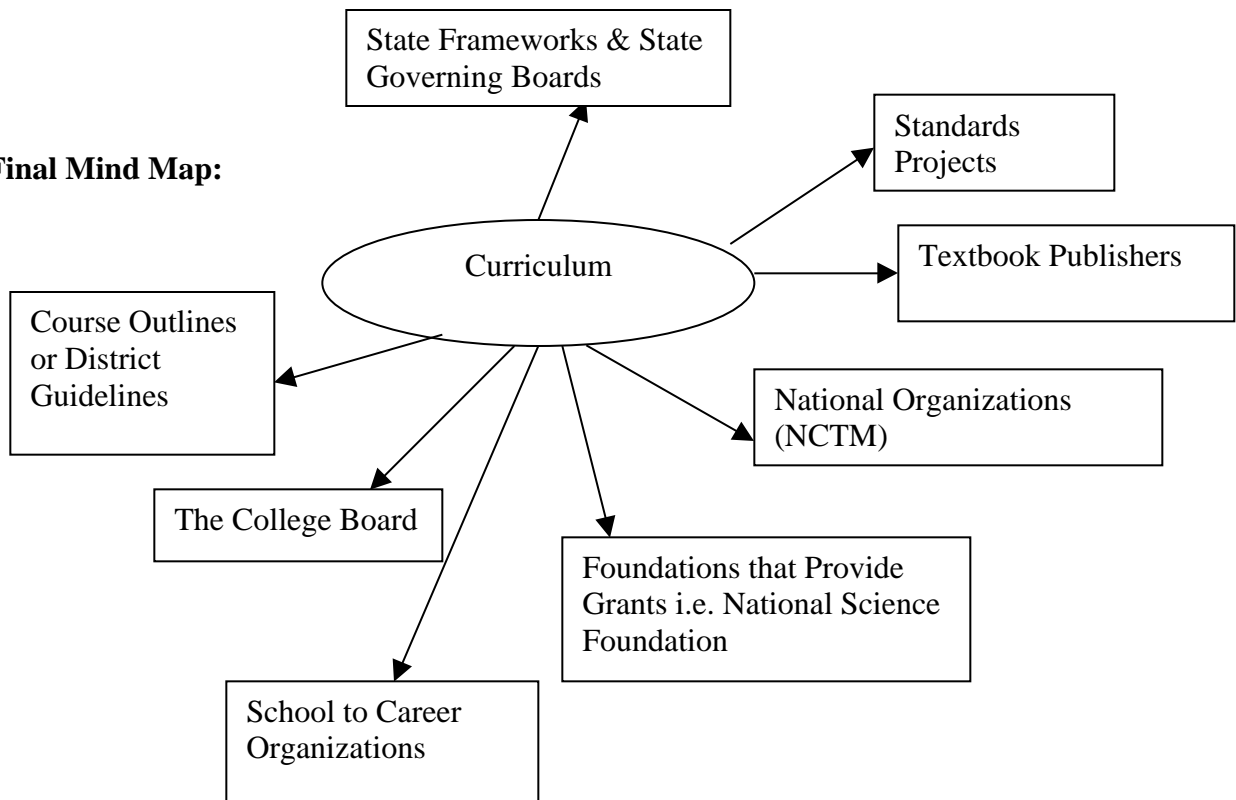
I found this site difficult to navigate. Because I was involved in an NSF sponsored project 10 years ago, I know that they have a great deal of influence in the area of curriculum development. The

research programs that are sponsored usually are conducted by the post-secondary arena, and it was difficult to find the how they select the k-12 research.

The College Board <http://www.collegeboard.com>

This wasn't in the listed resources, but I believe that it is a major contributor to the high school curriculum today. These are the people that create the SAT Tests, and the AP (Advanced Placement) Program. Since I just spent a week at training for AP Statistics and learned the expectations of that program. This organization decides what is taught and tested. "AP gives students an opportunity to take college-level courses and exams while still in high school. There are 33 courses in 19 subject areas, offered by 13,000 secondary schools around the world." The website provides complete course descriptions and timelines for teaching each of the courses.

Final Mind Map:



Final Rubric:

Rate yourself on the following scale:
Low Expertise 1 2 3 4 5 High Expertise
Topic 2: Curriculum
1 – F 2 – D 3 – C **4 – B** 5 – A

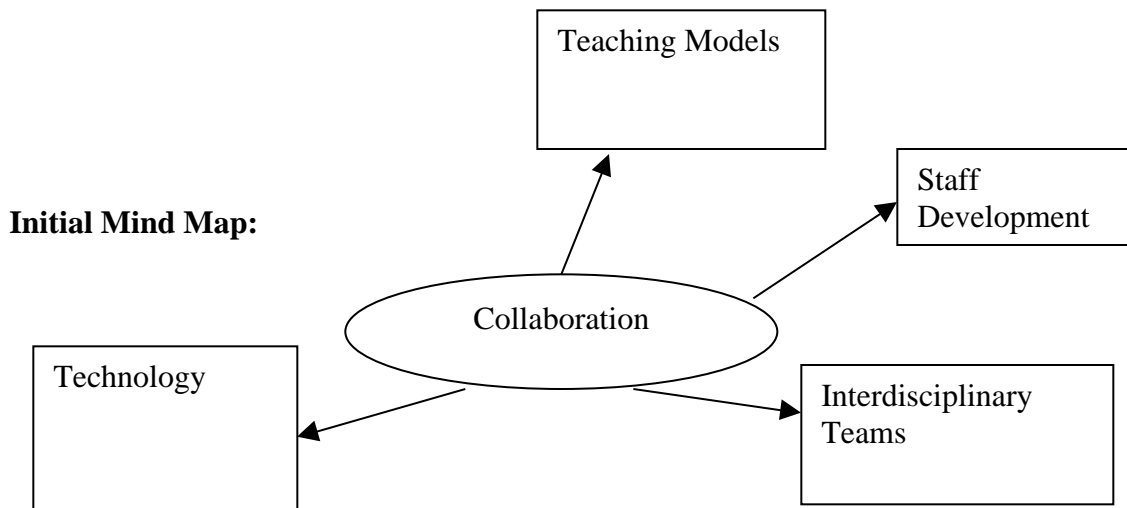
Conclusions:

Before I began reading on this topic, I read through the questions that were there and felt that I didn't know a lot of the answers. I had opinions based on my 16 years in the classroom, but I didn't feel that I necessarily knew who made curricular decisions. In

the middle of July I attended a one-week training for an Advanced Placement Statistics course that I am going to teach next school year. Midway through that training I realized that I had a number of answers for how high school curriculum for the college-bound student is developed. The College Board decides what courses and what curriculum and even suggests what text to use for those courses. Because of my involvement with a curriculum development project in math, I knew the process for creating a curriculum and the amount of work that goes into developing a working program. Also, as I read and looked at the websites suggested, I realized that what I thought were only my opinions had a measure of truth. For example, in the current wave of testing in California, many teachers feel the pressure to prepare students for the test. Curriculum and test prep materials are being marketed to this pressure. The textbook publishers, who respond to the trends and curriculum documents produced by state boards of education, create texts that meet this need. As math department chair the last three years, I received numerous copies of preview editions of books that were "designed to meet the CA State Standards."

Overall, I feel that I need to work more in this area. While I know the expectations and developments in math because that is where I teach, I am not as familiar with them in other areas. I think my first task, as a librarian might be to order the other frameworks in the other subject areas and familiarize myself with what is expected in those areas. By creating that knowledge base for myself, I could have a beginning understanding of where students are supposed to be headed in their learning.

Collaboration



Initial Rubric:

Rate yourself on the following scale:
Low Expertise 1 2 3 4 5 High Expertise

Topic 3: Collaboration

1 - F 2 - D 3 - C **4 - B** 5 - A

Notes on Readings:

Coughlin, Ed. "Professional Competencies for the Digital Age Classroom," *Learning and Leading With Technology*, Vol. 27, no. 2, November 1999.

The introduction to this article sounds like the school where I teach. While the technology is available and students have access the staff training and actual use of the technology is limited. I thought the stages of the technologic proficiency were interesting and provided a good overview of the development of technology use. The article doesn't provide solutions, but rather gives the expected end result. The challenge is how to get there. Visiting the Milken website led to some interesting information as well.

Buchler, Beth and Margaret Johnson. "Becoming a Learning Community" Online article at http://www.mff.org/edtech/article.taf?_function=detail&Content_uid1=289. 7/26/01

An interesting article discusses the importance of involving community in the technology process. It provided two specific examples of how the community can be made partners with the schools in technology development. I liked the specific examples of how the idea is being implemented.

Johnson, Margaret "New Roles for Educators" Online article at http://www.mff.org/edtech/article.taf?_function=detail&Content_uid1=290 . 7/26/01

Another interesting article that discusses the varied roles that teachers are having to take on in the technological time. It provides an interesting overview of the new roles educators are taking on and how that plays out in the school environment. While the author doesn't make it a major focus of the article, she does point out that because of the changes that have taken place oftentimes teachers are pulled from the classroom and placed into administrative positions to develop these skills. My question, who suffers? The

author discusses the role the web and web quests and other Internet based projects have in this new education picture.

Archer, Jeff. "Teacher Re-Creation" Editorial Projects in Education, Inc. January 18, 2001 Online article at <http://www.mff.org/newsroom/news.taf?page=172>.

This article focuses on the Teacher Advancement Program (TAP) sponsored by the Milken foundation. It explains the business model used to provide for different levels of teacher based on skills not just years of service. Also, this program emphasizes the importance of collaboration and working together in making for a successful teacher. A successful teacher doesn't work in isolation, but rather works with colleagues and tries to improve the learning environment together.

Bray, Barbara. "Eight Steps to Success: Technology Staff Development that Works," Learning and Leading with Technology, vol. 27, no. 3 p. 13-20.

This article focused on technology plans and how to use collaboration to incorporate technology. It provides specific steps to developing a collaborative effort and ongoing evaluation. Nothing I haven't seen or heard before, but where is the TIME?

Farwell, Sybil. "Successful Models for Collaborative Planning," Knowledge Quest, vol. 26, no. 2, January/February, 1998, p. 24-30.

A great article detailing how a library grant program was used to develop collaborative planning at a specific elementary school. I can see where this works well in a small school environment and with a supportive administration. Could it be translated to a larger staff at the secondary level? There are some great ideas imbedded in this article. It is one to remember!

Callison, Daniel. "Key Words in Instruction: Facilitator," School Library Media Activities Monthly, vol. 14, no. 6, February, 1998, p. 40-42.

This article focused more on the information literacy skills and how the media specialist can act as a facilitator to developing those skills. While collaboration is an outcome for students who learn to help each other it is a result rather than a technique. Although it would be a technique that provides for more information literate students.

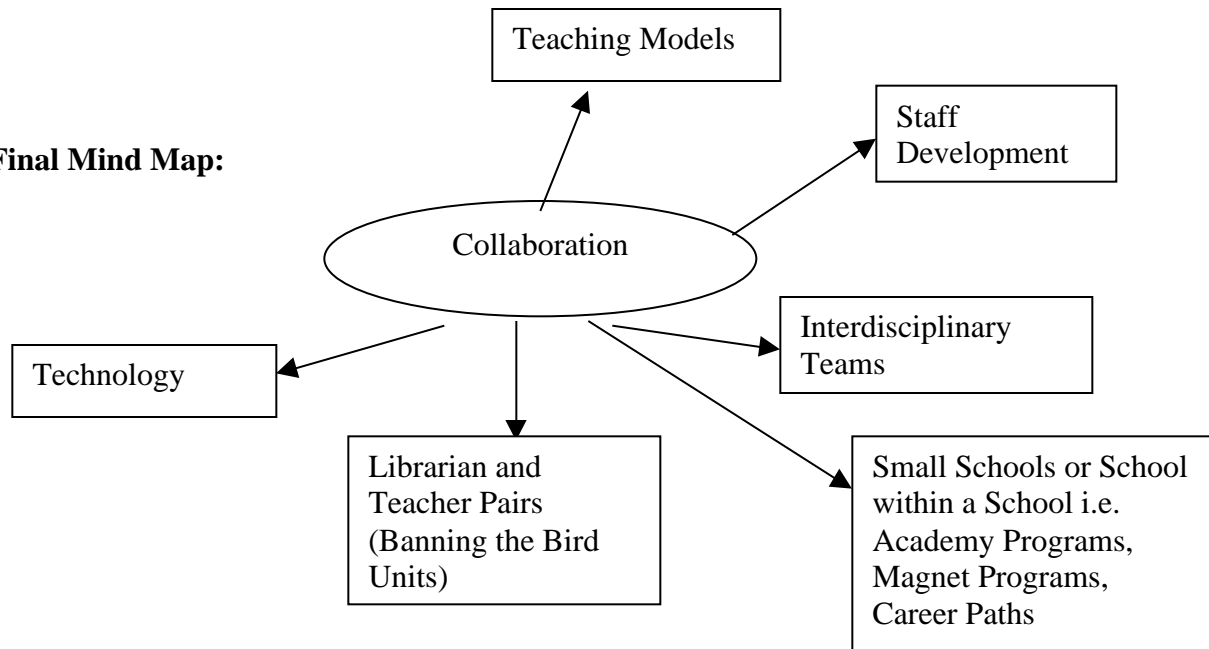
Dias, Laurie B. "Integrating Technology: Some Things You Should Know," Learning and Leading with Technology, vol. 27, no.3.

This article reinforces the idea of technology integration being a slow process that takes time. Also, it focuses on the need for teachers to be able to recognize what happens as technology is integrated. I'm not sure how this relates to collaboration, but coupled with an earlier article it is a new environment where a team working together could be better than someone working alone.

Goldsworthy, Richard. "Collaborative Classrooms," Learning and Leading with Technology, vol. 27, no. 4, December/January, 1999-2000

An interesting twist on what used to be called "cooperative learning" techniques. The incorporation of technology and classrooms that can be electronically linked to work together is a different way of collaborating. I liked the fact that the article didn't focus only on electronic techniques, but gave some face-to-face examples as well.

Final Mind Map:



Final Rubric:

Rate yourself on the following scale:
Low Expertise 1 2 3 4 5 High Expertise
Topic 3: Collaboration
1 – F 2 – D 3 – C **4 – B** 5 – A

Conclusions:

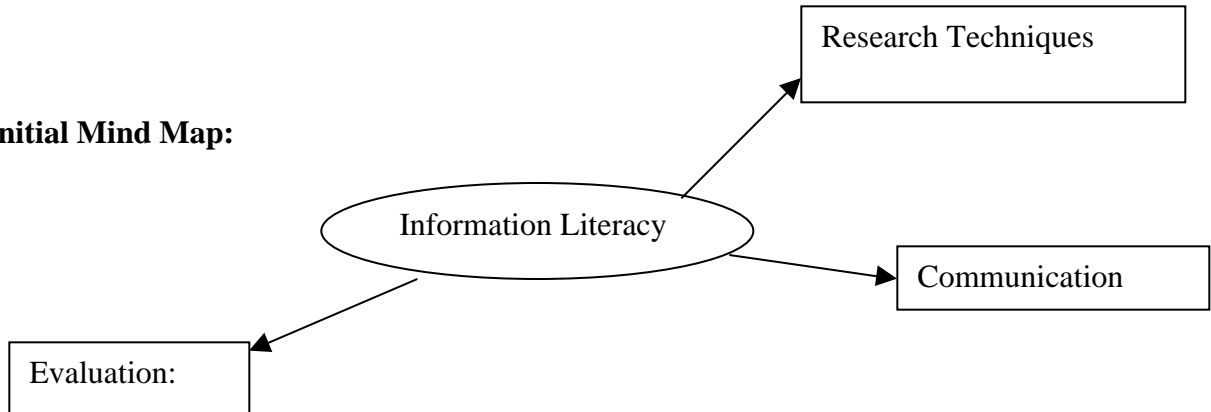
In this area, I don't know that I made significant growth. While I did readings and can answer the questions listed, I don't feel that I really learned anything particularly new from the readings that I did. I was interested to see that the focus for collaboration seems to be on technology. I believe that because technology is a relatively new area for all teachers it lends itself to working together.

My greatest growth in this area actually came from my work on module 3. By having to work with another person on that unit, I could see the collaborative effort in action. While I chose to work with someone in my class, we worked on "killing the bird" on a project that had been created with colleagues during the past school year.

In the reading that I did, I believe that the critical element in all of this is TIME! While I know it is often used as an excuse for not doing something, time is a critical need for any collaborative effort. That's why I liked the article on collaborative planning that was initiated through a library grant. I've never thought of the librarian as the person who could initiate the collaborative effort by providing the funding. This example opens up another place where I can bring more to the table than just the library building itself.

Information Literacy

Initial Mind Map:



Initial Rubric:

Rate yourself on the following scale:

Low Expertise 1 2 3 4 5 High Expertise

Topic 4. Information Literacy

1 – F 2 – D 3 – C 4 – B 5 – A

Notes on Readings:

Information Power: building partnerships for learning. American Library Association. Chicago and London. 1998

I now know what to expect or what should be expected for me as a school librarian. The challenge will be educating the staff, administration and students to the new role of the media specialist. Can the school really accept those changes? Like other national guidelines, I think it's a goal but will we ever have the time to achieve it before something else comes along?

Loertscher, David V and Blanche Woolls. Information literacy: a review of the research: a guide for practitioners and researchers. San Jose, CA. 1999.

An interesting read on how the research supports information literacy. It had some interesting points that were applicable to the classroom and school environment that I am most familiar with. Interesting points that jumped out at me include the idea in the finds and sorts section that students need to be equipped with searching skills to retrieve the information and that those places that provide information need to be modified to make the searching process better. In the section on reflection, the authors pointed out that the library can "fill in the gaps for students and teachers who are not performing well in any classroom." In the chapter focused on teaching styles, I believe that the important point that needs to be kept in mind is that although a constructivist teacher might be a better partner in collaboration, all teacher's and teaching styles can utilize the media center and provide meaningful learning for students. A librarian that is flexible and understanding will be more successful in their collaboration efforts.

From Library Skills to Information Literacy: a handbook for the 21st century. California School Library Association. San Jose, CA 1997

An overview of what should be happening to develop information literacy skills in schools. It has some specific examples of info. lit. skills in action. I liked the detail and variety that was used. However, once again math seems to be left out of the loop. The Key Word Search activities and ideas were very helpful to help students develop that process.

Loertscher, David. V. *Reinvent Your School's Library in the Age of Technology*. Hi Willow Research and Publishing. San Jose, CA. 1998

A must read for administrators and librarians alike. I really liked this book. It had a lot of practical suggestions, but I would worry that an administrator might expect immediate results here. Overall, this had great easy to use ideas that could be implemented immediately without too much difficulty. This is a great way to sell the importance of the library media center.

National Information Literacy Institute. "Best Practices and Assessment of Information Literacy Programs" Association of College and Research Libraries. Chicago, IL. May 2001.

This was a description of a project proposal for evaluating information literacy in academic libraries. While the majority of the article focused on the plan for evaluating an establishing model programs, the introduction reemphasized the importance of information literacy. Also, a strong point was made that the best efforts for information literacy are collaborative efforts and not solely the responsibility of the librarian. At the same time, the librarian is the front line person in creating a strong information literacy program and promoting the need for this to be a critical piece of the academic environment.

Hayden, K. Alix. "Information Seeking Models" University of Calgary, 1999 -

Hayden, K. Alix. "Information Literacy" University of Calgary, 1999

As I continue to read, I realize that I knew more about Information Literacy than I realized before I started the readings. In these articles, the author explained different models of information literacy and how they can be related to one another. While I didn't get any great "AHA" from the article it did provide me with a different overview of the models. I still wonder though what the best way to teach and demonstrate information literacy skills might be. Is there a best way? Is there a recipe that works? More questions than answers at this point.

Information Literacy Group. "Information Literacy Definitions" University of Calgary, 1999

Interesting quotes of different perspectives on information literacy. It makes one realize that there are a lot of different ways to approach a topic and not everyone agrees.

Ercegovic, Zorana; Yamasaki, Erika. ED421178 98 *Information Literacy: Search Strategies, Tools & Resources*.

An overview of one particular program focuses on how to teach information literacy skills. It provides the basics of the program and how it is addressing the needs of information literacy programs.

Evaluation of World Wide Web Sites: An Annotated Bibliography by Kathleen Schrock lists excellent resources for information evaluation.

This article emphasizes the importance of evaluation skills in information literacy. The author focuses on providing additional resources to help the reader teach and present evaluation skills.

Branch, Robert M, Dohun, Kim and Koenecke, Lynne. "Evaluating Online Educational Materials for Use in Instruction" ERIC Digest June, 1999

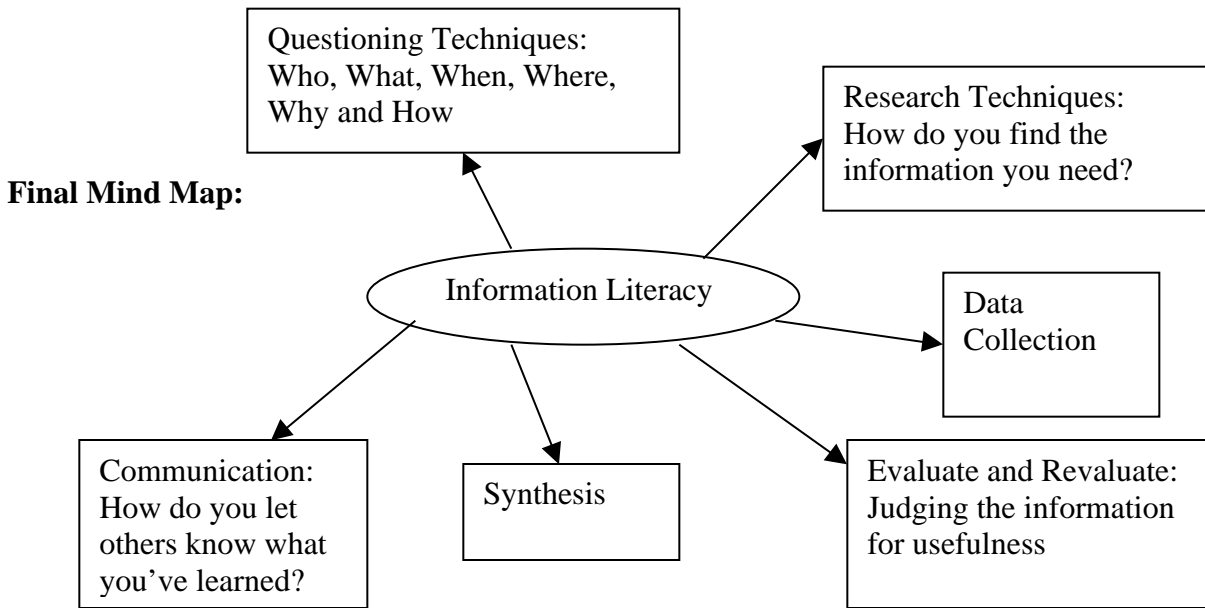
I really liked this article. Its presentation of 7 key questions to ask when evaluating websites is simple yet provides the user with some great questions to start the evaluation process. Also, the reference websites could be very useful in presenting the information to others.

Richetti, Cynthia and James Sheerin. "Helping Students Ask the Right Questions," *Education Leadership*, vol. 58, no. 3, p. 58-62, November, 1999.

While this article was in the resources for Information Literacy it could easily have gone into the collaboration or educational theory sections. The focus here is on constructivist questioning techniques and using them to develop students' thinking skills. Good concrete examples of application are used.

Brooks, Martin G. and Jacqueline Grennon Brooks. "The Constructivist Classroom: The Courage to Be Constructivist," *Educational Leadership*, vol. 57, no. 3, Nov. 1999

This article addresses the conflict between constructivist teaching and standardized testing. While it doesn't provide any answers to the dilemma it provides some interesting insight into the conflict. For me, it reinforced my feelings of frustration that I have been experiencing the last few years. Now, I know that I am not completely crazy and that I have the right approach. I still don't know how to fight against the standardized testing wave. Another important point that I agree with is that we need to move away from the idea of "one size fits all" education.



Rubric:

Rate yourself on the following scale:
 Low Expertise 1 2 3 4 5 High Expertise
 Topic 4. Information Literacy
 1 – F 2 – D 3 – C 4 – B 5 – A

Conclusions:

Since this was the area I rated myself weakest, I read more in this area than any of the others. As I read, I realized that I probably had rated myself too low to begin with. I really knew a lot of the keys to information literacy to begin with. What I didn't know was the formal structure and organization of these skills. Intuitively, I understood the pieces and parts of the research model or information literacy model. I had used each of those techniques myself in doing research as a history major in college.

From my reading, I can see small ways that I can begin to incorporate these skills into my own classroom. Even though I teach math, I can help students in developing

pieces of the information literacy skills throughout the school year. I know that it is easy to focus on my subject only. If my goal is to teach students how to learn then my subject is secondary. Information literacy skills are critical to students knowing how to learn!

Information Literacy Models

I was in the group that developed the information literacy model that was a set of keys that unlocked the door. This model reflected our idea that each piece of the information literacy model was a key that opened a variety of locks on a door. Once all of the locks were opened then the door could open and the research process was complete.

For my own personal information literacy model, I picture it as a maze. While I can crudely draw it by hand, I can't seem to translate the maze to the computer. The maze consists of a path that starts with a question and ends with the "AHA" and the final exit is the finished product of the research process. Along the way in the maze, a person may run into dead ends, which include bad searching techniques, information overload, and more questions. Along the correct path, are the synthesis, evaluation, conclusion and communication corridors, which lead to the final exit and the finished product. I wish I was a computer artist and could actually draw the model I have pictured in my head. I tried using some maze creating software downloaded from the Internet, but I couldn't add in my dead ends or corridors that I can see in my mind.

Collaboration Forms

Planning Sheet:

To be completed at the start of a collaboration project.

WHO?

(Who are the collaborators? Who is responsible for the different components of the project? Who is going to do the project?)

WHAT?

(What is the project we are going to work on? What does it look like? Can we map the project?)

WHEN?

(When are we going to do the project? When will the materials need to be gathered? Is there a timeline?)

WHERE?

(Where will the activity take place? Will the library be needed for an extended period of time or just for one class period? Where do the materials need to be available to students?)

WHY?

(Why are we doing this? Why will this help students develop information literacy skills and subject area skills? Why is this activity better than another?)

HOW?

(How are we going to implement this project? How will we evaluate the project both for student assessment and for success or failure of the activity itself? How do we know it worked?)

Evaluation Sheet:

To be completed after the project has been tested on students.

WHO?

(Who are the collaborators? Who was responsible for the different components of the project? Who did the project?)

WHAT?

(What worked? What didn't work? What can be improved or changed? What can be eliminated?)

WHEN?

(When we did the project, did we have enough time? When would this work better?)

WHERE?

(Where do we need to make adjustments and changes? Where else should resources be available?)

WHY?

(Why are we doing this? Why will this help students develop information literacy skills and subject area skills? Why is this activity better than another?)

HOW?

(How did the assessment work? How do we know this activity worked or didn't work? How can we improve it?)