A Teacher-librarian's Experience Implementing an Information Literacy Program

Mark Bendall

Department of Elementary Education

University of Alberta

UNIVERSITY OF ALBERTA

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A TEACHER-LIBRARIAN'S EXPERIENCE IMPLEMENTING AN

INFORMATION LITERACY PROGRAM

BY

MARK BENDALL

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_____

Dr. J. Branch
(supervisor's name for signature above)

_____

Dr. D. Oberg
(second reader's name for signature above)

Date: April 11, 2005
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A Teacher-librarian's Experience Implementing an Information Literacy Program

Why do I have to learn this? When will we ever need to know this? These are questions that teenagers typically pose when they encounter curricula that they do not see as relevant and, because they are legitimate expressions of how many of our students are feeling, the teacher who cannot provide an appropriate response will likely have difficulty engaging these students. In these times of fast-paced entertainment and sound-bite news teachers are often left feeling that they have to perform with MTV-like pizzazz to maintain the interest of their audience. But, as teachers, we don't have the resources to make every lesson brilliantly entertaining, so we must look for other ways to make our teaching meaningful. We need to find alternatives to lecturing that truly involve students in the learning experience.

As a classroom teacher, working in a number of different subject areas for over 15 years, the importance of helping students develop thinking skills has long been a prime focus. The importance of the curricular content was clearly as a vehicle with which to develop skills and build knowledge that would be useful well beyond the limits of a specific course. In fact, I have often explained to reluctant students that, just as lifting weights will make an athlete stronger, thinking will make you smarter. And, just as a football player will never have to lift a heavy dumbbell during a game, it is not what you think about but how hard you think that makes you a better thinker. Most students were able to see that even though they may never again have to find x, or solve a problem in chemistry, the ability to solve problems in a logical manner is a skill that they certainly

could benefit from. Often the process of learning is more valuable than the information learned.

As a new teacher-librarian, and as a student in graduate level courses in teacher-librarianship, it soon became clear that there was a much more important role to play than simply managing the library facility and its resources. While there was much talk about the importance of teaching students how to think critically as they locate, evaluate, and use information, no one was actually doing anything about it. Classes would regularly come into the library with a topic to research, but were then left to use whatever skills they had previously developed to find the information that they needed. Far too often this "research" involved some simple Internet searches followed by a lot of copying and pasting to produce reports that ranged widely in the quality of the content and in appearance. More disturbing than the blatant plagiarism, and the fact that many students had not actually read their entire report, was the lack of any use of higher-order thinking skills.

There was clearly a need for an educational program, spearheaded from the school library, which combined critical thinking skills and information processing skills. A well designed program should be able to engage students by sparking an interest in content, especially if students are given choice in the topic to be investigated, or at least involve them in a process that they see as valuable, but hopefully both. In this paper I examine the various approaches to information literacy as evidenced in the educational literature, outline the process of adopting a model and planning a program for Vernon Secondary School, and discuss the experience of implementing the first two years of the program.

Information Literacy

> In the words of Canada's former National Librarian, Roch Carrier:
>
> Children need to learn how to find information, to choose and apply information. They must have teacher-librarians who are dedicated to guiding them in developing their skills, but also to developing in them the love of lifelong learning. … It is past the time to make the investment needed to ensure that our children grow up to be literate citizens and lifelong learners in the global knowledge society of the 21st Century. (Asselin, Branch, & Oberg, 2003, p. vii)

There have been many recent studies relating the importance of a strong school library program to student achievement (Lance, 1994; Lance, Hamilton-Pennell, & Rodney, 1999, 2000; Lance, Rodney, & Hamilton-Pennell, 2000; Rodney, Lance, & Hamilton-Pennell, 2002; Todd & Kuhlthau, 2004), and many authors who point to the approach most commonly referred to as *information literacy* as the preferred method to achieve such goals (Asselin, et al., 2003; Brock, 1994; Carey, 1998; Doyle, 1994; Eisenberg, 2001; Haycock, 1995; Hill, 1997; Hughes, 1997; Kuhlthau, 1995; Oberg, 1999; Steeves, 1996; Stripling, 1995; Toronto District School Board, 2002).

Loertscher and Woolls (1997) trace the roots of the information literacy movement back to the work of John Dewey in the 1930s and of Benjamin Bloom in the 1950s. In contrast to the behaviorist school of thought that views students as passive learners, as vessels to be filled, and teachers as the experts in the position to pass on their knowledge, constructivists view the role of educators as guides. Cognitive and brain research indicates that people learn best when they are encouraged to construct their own knowledge from a rich array of information sources. In the school library arena, this educational philosophy was first applied to instructional design in Canada with the name Resource-Based Teaching, with the term information literacy being the "library media version of

constructivism and critical thinking" (Loertscher & Woolls, 1997, p. 344). Information

Literacy's popularization in the late 1980s signified the adoption of constructivist

principles to guide learning projects using a wide assortment of resources and

technologies, known also as inquiry-based learning or project-based learning in the broader

educational community.

Today information literacy is typically defined as "the ability to access, evaluate,

and use information from a variety of sources" (Doyle, 1994, p.5) and "an information

literate person is a lifelong learner, skilled at using complex cognitive processes and

diverse technological tools in order to solve problems in personal, social, economic, and

political contexts." (Asselin, et al., 2003, p. ix).

In his 1998 study of educational policy documents from across Canada, Doiron

found that "most provinces and territories had in place clearly defined policies or

guidelines for the school library within the overall goal of developing students as

independent, lifelong learners" (p. 2). In fact, one of the five major conclusions that he

reached was that these policies "affirmed resource-based learning as the principal learning

approach for students using the school library" (p. 2).

One of the problems hampering the widespread adoption of a framework for

information literacy instruction is the large number of similar models available to the

relatively limited number of educators looking to implement new programs in these times

of slashed budgets and drastically reduced resources. Whether the problem is that a model

is used simply because it is readily available, without considering the important features

available in other models, or that a model is incompletely or inappropriately adopted, the

result is the same. Less successful programs are unlikely to be maintained, and even less likely to be expanded. What is needed, to encourage others to make the effort required to implement their own programs, are numerous success stories focusing attention onto a single model. At present, however, without a clearly dominant model, it is necessary to examine the major models available in order to determine the best match for local needs.

Current Models

An information literacy program is an effective way to develop important skills through the collaborative planning of research assignments that take advantage of the resources and expertise in the school library media centre. Traditionally, research assignments have involved the teacher supplying a topic and then sending students off to find information and produce a report. Although the teacher-librarian might have been involved in pre-selecting some resources, there was often little instruction in how to search, and usually no mention of how to evaluate the information found. The need to replace this mechanistic practice with a process approach has been a key feature in all information literacy models and in much of the related research (Herring, Tarter, & Naylor, 2002; Kuhlthau, 1993; Todd, 1995; Todd & Kuhlthau, 2004). A process approach supports a constructivist view of learning, having students build their own knowledge on a foundation of what they already know. It also usually includes the development of metacognitive skills, as students are made aware that they are learning how to learn, and reflection, as they self evaluate and rethink.

A survey of information literacy models that are currently in wide use shows a plethora of variations on a common theme. All of these models involve a focus on the

student as a learner and on the process of learning from information. They lay out a multiple stage process that the student as researcher will follow, although not necessarily in a linear order. "There are many process-based models of library instruction [for example] in Britain, we see the work of Ann Irving, Michael Morland and James Herring; in the United States, we see the work of Carol Kuhlthau, Barbara Stripling and Michael Eisenberg" (Oberg, 1999, The Alberta Model for Teaching the Research Process section, para. 1). In Canada, as education is a provincial jurisdiction and each province has many school districts, there are programs developed on at least three distinct levels. For example, the Canadian School Library Association and The Association for Teacher-Librarianship In Canada have recently produced *Achieving Information Literacy: Standards for School Library Programs in Canada*, a "national information literacy framework…intended to provide a national set of standards" (Asselin, et al., 2003, p. vii). This is, however, not an educational framework intended to direct specific instructional practices, but a set of standards by which to judge the state of our school library programs and facilities.

The BC Teacher-librarian's Association's Research Quest Model is designed to "build information literacy and critical thinking skills" (British Columbia Ministry of Education, Standards Department, 2002, p. 11). It provides a process framework that emphasizes the importance of planning and reflection and the application of appropriate skills at each stage of the process. The sample units, while tightly integrated with specific curricula, are limited in number and require a significant commitment of time. The two designed for the junior high school grades require from 10 to 15 classes to complete.

Classroom teachers, ever conscious of having to cover an extensive curriculum in a limited amount of time, are likely to see this as too large a commitment to make. Information literacy goals, although arguably the most important learning objective, are seldom evaluated on subject specific provincial achievement tests. Thus teachers, under pressure to prepare students to do well on the increasing number of province wide examinations, need to see a program that will integrate easily with projects that they already have confidence in. They need to see how information literacy education will help their students meet their curriculum objectives more successfully without adding more work to their already full plate. A program that can help teachers do a better job of teaching, that allows them to feel better about their own and their student's successes, and that has the side effect of imparting transferable information literacy skills has a good chance of being adopted. When looking at initiating a lasting change in the way that students learn and in the way that teachers design assignments, work with students, and evaluate their learning, it is essential that it be done in a manner that is easily accepted by the majority of the teaching staff. The Research Quest model is not flexible enough and does not have all of the required elements to be the underlying framework on which to build a program.

From another level of educational administration is the extensive *Library and Learning Resources* produced by the Toronto District School Board (2002). This recent production contains many nicely laid out worksheets to help students through its four-stage process. The non-linear nature of the research process is pointed out to students in this model, as it is in many of the others. Students are told "that for some assignments, you will follow the process step by step and in order, but for others, you will need to backtrack

and re-use a previous step" (p. 3). This idea of going back involves the researcher reflecting on their work and having a clear understanding of the process that they are following and is also a key component of the model developed in Alberta. "This 'review process' is a valuable feature of the Focus on Research model that enhances metacognitive understanding" (Steeves, 1996, p. 71), "reviewing the process is a critical element for helping students to understand research as a learning process" (Oberg, 1999, Throughout: Review the Process section, para. 1) and it is one of the elements that make this model, and the new Focus on Inquiry, stand out from the others. Another significant feature of this model, and one that it shares with a few of the others, is that it "contains skills for a continuum of research procedures and skills for a continuum of levels of research, introductory to advanced" (Alberta Education, Curriculum Support Branch, 1990, p. 4). It has an extensively laid out "five stage model, with one element common to each of the stages, Review the Process" (Oberg, 1999, The Alberta Model for Teaching the Research Process section, para. 3). At each stage of the process, in fact for each task required, actions are outlined for Introductory Level Students, who are predominantly educator directed, and for Advanced Level Students, who have become self directed.

The current model that is probably the closest to claiming top billing as the most popular, with an extensive following "throughout the United States [and] … stirring up interest throughout Canada and Australia" (Hughes, 1997, p.8) is Eisenberg and Berkovitz's Big Six. This model also has a Continuum of Research Levels, but its most significant advantage is that, due to its widespread popularity, there are many resources, reviews, and associated teaching materials readily available. Although it is not based on

actual research, this model is extensively marketed by its authors, who have built quite a business from it, and is thought by some to have reached the critical mass of popularity required to become self sustaining. In the words of one of its authors "this is the most widely known and widely used approach to teaching information and technology skills in the world" (Eisenberg, 2001, para. 1). The multitude of resources available from the authors, and from educators who have adopted their model, is in quite stark contrast to the lack of supplementary supporting resources available for most other models. In support for the Alberta and Toronto models, however, it must be mentioned that the documents themselves are extensively laid out. They spell out clearly the roles of all participants, the stages of the process with both skills and strategies, planning guides for staff and students, evaluation guides, and extensive examples.

A research-based model that distinguished itself from the others, by directly identifying the current stage in the process and by calming anxieties, was Kuhlthau's (1995) Information Search Process. The mapping out of the cognitive and affective factors that accompany the actions involved with each stage in the process was a significant and powerful factor unique to this model. Most high school students, and probably most people in general, tend to believe that more capable researchers feel confident throughout and that anxieties are signs of personal weakness. Letting students know that they shouldn't worry about feeling lost or confused at certain stages of the process, and that most people do experience those feelings, can go a long way to building self confidence as well as building confidence in the process model. Thus the brilliance of Kuhlthau's model is that students

are more likely to apply appropriate strategies because they can determine the stage in which they are working by examining their actions, thoughts, and feelings.

Regardless of the particular models being used, there are two factors working against the information literacy movement in general. The first is individual educator reluctance, or inability, to learn and implement new methods. The other significant factor is the lack of administrative support and directive from provincial ministries, district school boards, and school principals. This is despite the broad educational goals speaking to information literacy and lifelong learning that permeate all levels of the educational hierarchy.

Doiron points to the 1995 publication of Ontario's discussion paper "Information Literacy And Equitable Access: A Framework For Change" as it "seemed to be holding out a new vision for school libraries that reflected a new understanding of information literacy and the role technology would have to play in the future" (1998, p. 10). But, "unfortunately, this paper was a lone voice, and … [has] not led us into a new vision" (p. 10), and the finger of blame points in two directions. Although he attributes the local political agenda as the most significant factor, the lack of response in the school library community, not being willing to embrace a new role for the school library and the teacher librarian, is also seen as contributing to the document's lack of acceptance.

In Alberta the instructional model, *Focus on Research*, developed as a response to teacher and teacher-librarian demands, met a similar fate. "The momentum generated by these initiatives has been lost in the province as a result of a change in government and a change in political philosophy" (Oberg, 1999, para. 7). Carey (1998) found that the

situation was no better in the Unites States. "Even when states specify the desirability of information literacy, they typically prepare tests to measure it in ways that are at odds with constructivist theory" (Research Trends and Current Practices section, para. 2).

Alberta's model has recently been updated, and extended, and renamed *Focus on Inquiry: A Teacher's Guide to Implementing Inquiry-based Learning*. The revision, prompted by many changes that have occurred in the past decade, includes "a deeper consideration of the implications of technology and the implications of the affective nature of inquiry-based learning" (Alberta Learning, Learning and Teaching Resources Branch, 2004, p. ix). The integration of the cognitive and affective factors with the actions associated with each stage in the process, as introduced in Kahlthau's (1995) Information Search Process, is now an important feature of the Alberta model. This, combined with the many other features discussed, make the *Focus on Inquiry* model a comprehensive framework for information literacy education, and suitable to serve as the foundation of the program at Vernon Secondary.

Research Findings

Although, as has been mentioned, there are vast amounts of educational research accumulating that consistently relate high academic achievement to well-supported school library collections and programs, securing the funding required for maintenance of such facilities and staffing is always a political decision. Whether the politics we speak of occurs within the building, the district, the province, or even federally, it is only by showing the value of school library programs that we can hope to ensure that they have the support that they require to thrive. Haycock has found that:

> The mere presence of a facility with staff and resources is not sufficient in and of itself to bring substantial gains in achievement … substantial gains are made through specific behaviors of that staff and the nature of their interaction with teachers and administrators. (Asselin et al., 2003, p. 63)

An extension of this argument can be proposed: even with a chronically under funded library collection and with a program that has suffered significant cuts to staffing hours, it is still possible to generate gains in achievement through the collaborative efforts of the library and teaching staff. The goals of educational administrators, educators, students, and politicians seldom match, but information literacy education seems to provide an exception.

Although the importance of information literacy education has not been actively promoted, through either pre-service teacher preparation (Asselin & Doiron, in press) or Ministry initiatives, it has not been lost on those charged with preparing curricula as "research is an integral part of almost all the content areas and grades" (British Columbia Ministry of Education, Standards Department, 2002, p. 11). Information literacy learning outcomes are found throughout the BC Ministry of Education's Integrated Resource Packages. Analysis of just the English, Social Studies, Science, and Information Technology courses, from grade 8 through 12, shows 295 occurrences of such outcomes (Bens, Burton, Driscoll, McConnell, Nelson & Oliver, 1999). The developers of this analysis note that the information skills are a school wide concern and should be taught through collaboration between teachers and teacher-librarians (Bens, Burton, Driscoll, McConnell, Nelson & Oliver, 2000).

Other researchers remind us of the importance of integrating these skill lessons, and the whole inquiry process, with subject matter content (O'Sullivan & Scott, 2000a). The

need for a team approach, lead by the teacher librarian but also requiring strong and active support from the school's administration, is also seen by many as being crucial to the success of any information literary program (Farmer, 1999; Kuhlthau, 1993; O'Sullivan and Scott, 2000a, 2000b; Todd, 1995).

Looking at potential obstacles to the implementation of an information literacy program, McCracken (2001) found, from analysis of 505 surveys returned from 1000 randomly distributed to school library media specialists in the United States, that these professionals "perceive they are unable to fully implement their roles in practice" (para. 1). The most common reason given by high school librarians was lack of time, with too many schools or students to provide for. Other reasons included lack of time to plan with teachers, lack of collegial cooperation, and lack of funding and clerical support. The findings of this study complement Kuthlau's 1993 findings from surveying teacher-librarians from Canada, the United States and Sweden who were involved in the implementation of a process approach to information skills. She found that that the main reasons that programs stalled were a lack of time for students to complete the process and poorly designed tasks. The latter implies that the instructor, teacher or teacher-librarian, had not been fully aware of the principles behind the program, or did not have the time to properly prepare for it. Latrobe's (2001) case study of a specific school district, chosen because of its exemplary status, showed "consistently positive correlations between the school community's involvement in the library media program and positive assessments of the program" (para. 1). Thus the obstacles seem high, but the benefits clearly justify the effort.

Without the added burden of implementing a new program, teacher-librarians talk of the immense and increasing time pressure that they are constantly under. Following many years of fiscal restraint in most jurisdictions, a school library that has not had a reduction in teacher-librarian and support staffing, and budget, is a rare case. In situations where teacher-librarian positions have not been directly reduced, the same effect has been achieved through the addition of extra non-enrolling duties such as computer coordination, learning resources budget management, and enrichment program supervision. The fact that teacher-librarians have had difficulty finding the time to adequately prepare for and implement a new educational program is not surprising. Often teacher-librarians have had to deal with both staffing and budget reductions, and the addition of extra duties, as is the case at Vernon Secondary. The fact that many are not even willing to attempt to implement a new program is regrettable, but also understandable. Studies emphasize that if a program is to be successfully implemented, it must be given a high enough priority in the day to day time management of the staff members involved, to receive a sufficient amount of time in both the planning and the teaching stages.

Lance (1994), in a study examining the relationship between library programs and student achievement in 221 public elementary and secondary schools in Colorado, found that there was a direct correlation between library media center funding and student achievement and that students with library media specialists that participate in the instructional process were higher academic achievers. This was followed by Lance, Hamilton-Pennell, and Rodney's similar studies in Alaska (1999), Pennsylvania (2000), a second study in Colorado (2000), and one in Iowa (2002). In all of these studies the

authors looked at school and district data, in particular the reading test scores of students in fourth, or fifth, eight and eleventh grades, and consistently found that achievement rose with library media program development, and that these results could not be attributed to other school or, in most cases, community conditions. Based on these studies, it is reasonable to expect that the implementation of an information literacy program at Vernon Secondary School will also result in observable increases in student achievement.

While researchers have looked extensively at the implementation of information literacy programs and the relation to students' academic achievement in specific subject areas, there has been very little research into the effects of this type of a program on student attitudes. Todd (1995), in an experimental investigation to "determine the impact of an information skills program integrated into a particular curriculum on learning and on student attitudes" (Methodology section, para. 1) found that with the elementary classes studied there appeared to have been a significant positive impact. This well documented research used two forms of a locally developed information skills assessment instrument as pre and posttests for both the control and the experimental groups, as well as two standardized attitude tests given after treatment for the purpose of establishing benchmarks and identifying trends that could warrant further study. Academic achievement was assessed, after establishing that there was not a significant difference in academic ability between the classes, by examining the results of subject specific school-based exams. The treatment groups showed a significant increase in both information skills, for which they received direct instruction, and in subject specific skills and content. Analysis of the attitudinal data showed slightly higher scores for the treatment group in many categories,

but with no previous data for comparison it was not possible to determine any trend. Todd's conclusion that the results "point to the value of both a process approach and an integrated approach to information skills instruction" (Conclusion section, para. 1) support the plan to implement an information literacy program with these features at Vernon Secondary School.

In their 2004 study of "thirty-nine schools across Ohio … selected on the basis of providing an 'effective school library program' "(p. 3) Todd and Kuhlthau "sought to collect data from the students themselves … a key difference to the major state-wide studies to date which have collected data from school staff input" (p. 2). Recognizing that these previous state-wide studies, conducted by Keith Curry Lance and colleagues, documented "the significant role that an effective school library plays in student achievement" (p. 2), Todd and Kuhlthau "sought to understand how students benefit from school libraries through elaborating 'conceptions of help' " (p. 1). By using two survey instruments (one for students and one for staff), comprising 48 statements with Likert responses and an open ended question, the researchers were able to evaluate and identify students' and staffs' 'conceptions of help' and the outcomes of help given by the school library. From their findings, Todd and Kuhlthau were able to conclude that "effective school libraries clearly help students with their learning in multiple and diverse ways … [and] an effective school library and its professional, curriculum-centered school librarian, represent a major opportunity for students in Ohio to learn" (p. 20). Hopefully this will also be the case in Vernon.

The Local Situation

Vernon Secondary is a well-established school serving a predominantly urban, and racially quite homogeneous, student population of approximately 1000. It is situated in a residential area quite close to the city centre of a town in the southern interior of British Columbia with a population of about 45,000. The school offers a full range of academic and technical programs and has strong arts and athletic departments. Academic achievement, as measured on standardized government exams, is usually close to or slightly below the provincial average. Increasing achievement in the core academic areas, and in particular reading and writing skills, has been identified as a school goal.

Library programs at this school have been confined to direct instruction of basic library skills to grade 8 students. The library's staff has been available to assist student or teacher patrons with information searches, but this has not extended into evaluating the information found or into how it can best be used. Collaborative partnerships have been formed with a number of colleagues who regularly make use of the library and its resources for research assignments, although this has only recently extended into cooperative planning of lessons. Thus all the ingredients, need and opportunity, are in place for the implementation of an information literacy education program that will provide students and teachers with a rewarding experience that enables them to reach both higher and broader educational goals. This program will be both progressive, as it takes students through a series of steps each year reviewing and building on the previous one, and integrated and collaborative, as the skills and processes will not be taught in isolation but as a way to excel in the completion of curricular assignments.

Program Planning

The process of designing an information literacy education program started with an examination of available models, and the selection of the Focus on Inquiry model, as previously discussed. However, even with such an extensive and well laid out model there was much to be done in order to be able to use it as the basis of a grade 8 to 12 program. Decisions concerning the appropriate skills to introduce at each level and when to actually introduce the process stages in the Inquiry Model needed to be made with the intent of designing a program that helps students build their knowledge and skills in a logical progression.

Once a detailed outline of lessons and activities had been written, and a summary chart produced (see Appendix A), there was then a need for much flexibility. Through the collaborative process of planning the grade 9 classes, for example, it was decided to move the introduction of the Reference list to the following year. It was agreed that the completion of the Note-taking/Citation sheets would serve the purpose of introducing the importance of crediting sources while also providing students a convenient way of documenting the sources of the information that they planned to use. This modification also fits well with the constructivist approach of helping students build on previous knowledge. The extra step of producing a Reference list will be relatively straight forward for students who are already familiar with locating and recording the relevant information.

Program Implementation

Having a well thought out plan was also essential in selling the program to the administration and teaching staff. Through a process of presentation and discussion with

the principal, department heads, and then teaching staff by departments, the program

received endorsement. The levels of support ranged from enthusiastic to reserved, with

only a few approaching reluctant, and most being quite encouraging. The built in flexibility

required by the collaborative nature of the planning process allowed each group to see a

way that the information literacy program could fit in with, and enhance, work that they

were already doing. Being part of a school wide all-grade program, with only a portion of

the overall program being presented in each subject area, seemed to help build a sense of

shared responsibility which helped encourage participation. The fact that only one subject

area would go through the initial planning stage each year, and thus for most there was

plenty of time to ponder and prepare, also seemed to ease concerns and help the program

gain wide spread acceptance.

Currently, as this is only the second year of the program, only the first two levels of

the program have been implemented. The presentation of the three hour Grade 8 program

to eight groups of students in the first semester of both the 2003/4 and the 2004/5 school

years has allowed for plenty of fine tuning. Although the main plan has not changed at all,

the details of the activities and exercises that the students are involved with have been

modified quite significantly in an attempt to best achieve the intended goals. By

considering student responses to the searching activities, instructions and inquiries have

been altered to help lead students to the understanding intended. This program is presented

by the teacher-librarian with support from, but not collaborative planning with, the

classroom teachers as the objectives are in addition to the objectives of the Study Skills

curriculum.

Grade 8 Study Skills (3 of 25 classes for Information Literacy in this 5 week course)		
Lesson	Location	Topics Covered
#1	Lab	• Introduction to school network (labs & library), Open file from Projects folder & Save to own file-space • PC computer basics (drives & storage, problem solving), similarities with & differences between the Mac platform • Library Catalogue searching (Keyword vs. Subject, Title, Author, Expert (Boolean)) – guided practice
#2	Library	• Library resources • Library organization • Dewey Decimal system and sequence of decimal numbers • Online resources • Circulation policies • Library use guidelines
#3	Lab	• Internet history & general description • Site-ing (known URL), surfing, and searching • Search engine, directory, and meta search • Boolean search activity • Own search activity • paperless submission of assignment via school network

This year's Study Skills teachers have both started booking a fourth class in the

Multi-use computer lab to allow their students to do more work on the searching activities.

They have also started to present some of the skills required, such as submitting

assignments via the school network, during this extra period. This has been a welcome and

unexpected development, and may lead to more of a team teaching approach with the

grade eights. Although the school's principal, and both of the teachers involved this year,

have expressed a desire to maintain these teaching assignments for next year, there are

scheduling issues that may interfere. With a consistent collaborator, or collaborators, a team approach to program presentation, and even planning, could be very effective. As many of the skills presented to the grade eights are also new to the teaching staff, a team teaching approach is not effective when new staff members are assigned to the Study Skills program.

The advantages of offering the grade 8 program in collaboration with the curricular objectives from a different subject area have been considered. However, the convenience of being able to work with all grade eights in their first semester of high school was an important factor. The other main influence on this decision was the need to, as Campbell & Cordiero (1996) put it, "negotiate with classroom teachers for the time and opportunity to teach information skills" (p. 3). The teaching staff, and the department heads in particular, have been supportive of this school wide five-year plan by agreeing to collaboration in academic subject areas for all of the other grades. Finding a course that all grade eights take, that is not already involved at a different grade level, and that has departmental support for information literacy education, was not possible.

The Grade 9 program, in comparison, is a totally collaborative undertaking. Well in advance of the first class the classroom teacher and teacher-librarian must meet to plan the assignment, the process, the evaluation, and the scheduling of classes. The combination of the teacher's curricular objectives and the teacher-librarian's process objectives need to be blended into an assignment that requires higher level thinking while offering students plenty of opportunities for choice.

Trying to convince a teacher to dedicate more than just a few periods of class time for a research project can sometimes be a difficult task. However, starting with a more modest proposal, and then allowing for modification as the need arises, can be a more effective way to achieve the goal of allowing students sufficient time to Plan, Retrieve, Process, and Create. A teacher seeing their students actively engaged in productive work is likely to be flexible enough to extend their timeline as needed.

Comparing the initial five lesson plan, designed collaboratively by the classroom teacher and the teacher-librarian, when neither of them had experience with the activity, with the results of the modifications made during the process, indicates how much the time required for students to Retrieve and Process information was underestimated.

Grade 9 Social Studies (Native Cultures research project)		
Lesson	Initial Plan	Adjustments
prior to start	1. introduction of Note-taking/Citation sheets, and completion with textbook	didn't occur
#1 {classroom}	2. Assignment introduction: goals, stages, requirements [Teacher] 3. Team teaching to combine Library skills and process [T] 4. Grade 8 to 12 Information Literacy program [Teacher-Librarian] -see Appendix A 5. Old vs. New research process [T-L] 6. "The Big Purchase" activity (for reflecting on process) [T-L] -see Appendix B 7. Inquiry Model [T-L] 8. Process Journal [T-L] -see Appendix C 9. Note-taking and citation sheets	1. (as well as 2. through 11.)

	(crediting expert sources and avoiding plagiarism, organizing information retrieved) [T-L] 10. Minimum number of sources required, and minimum number of types of sources required [T] 11. Evaluation of process and product [T]	
#2 {lab}	12. Library Catalogue (OPAC) searching review [T-L] 13. Trustworthiness of Internet information vs. Online Database information [T-L] 14. Online Database use [T-L] 15. Subject specific and more general CD-ROMS [T-L] 16. Note-taking/citation sheet use for online resources [T-L] 17. initial searching to focus topic	
#3 {library and/or lab}	18. Format and Topic due (at start of class) [T] 19. information Retrieval time, either location 20. Note sheets to be handed in for checking (at end of class) [T]	19. only
#4 {library and/or lab}	21. return note sheets [T] 22. continue research, should also be starting to process 23. Creation to be done on own time (#3, #4, and #5 were not scheduled as consecutive classes to allow time to work on this project 24. Return Process Journal and discuss individually	18. and 20 neither 21. nor 24.
#5 {classroom}	25. Presentations	#5 21., not 25. -more time to work in the library or lab
		#6 24. -last class for Retrieval and/or Processing

		#7 -demonstration and discussion of presentation skills, techniques, and evaluation (point form notes, with highlighting; content requires introduction, interesting, and a clear conclusion; pronunciation, enunciation, eye contact, posture, pose, pace & flow) - class time for Creation
		#8 25.
		#9 finish 25.

Reflections

Having completed the first two planning and initial teaching sessions with the grade 9 classes it was a relief to find that the process was not as overwhelming as first imagined. Once the initial collaborative planning session was conducted a solid template had been constructed that then just needed modification to be used with other teachers in the same subject area. With Social Studies 9 the second teacher came to the planning session with a completely different assignment in mind, but as it dealt with the same Native Cultures topic area it fit perfectly with the series of lessons planned and the resources identified previously. The fact that it already involved a number of opportunities for student choice, and required the use of higher-order thinking skills further reduced the amount of work required at this stage.

The requirement for a substantial amount of initial planning, of a series of classes that integrate curricular and the information literacy objectives, can be expected to be

similar for the grade 10, 11, and 12 programs that will be introduced over the next three years. It is also expected that subsequent collaborative planning sessions will be able to take advantage of a previously tested template, and the only modifications required will be to take into consideration the individual teacher's assignment specifications and class requirements.

Whether the success of this program can be sustained as it is expanded is a major concern. This program, as it is now being implemented, will require an increasing number of hours, in both the planning and teaching stages, at a time when it is already difficult to keep up with all of the duties required of the teacher-librarian position. Although there are only vague reasons to believe that there will be any changes to the current level of library staffing, it is hoped that the combination of the successful implementation of this valuable educational program combined with a relaxing of the severe provincial funding restraints may at least allow for an increase in support time. While the library program had a full time teacher-librarian and a full time library-assistant as recently as three years ago, the current level consists of only 25 hours per week of support time and a 0.8 FTE teacher-librarian. The result of these reduced staffing levels is the need for enormous flexibility in scheduling to ensure that the library can remain open while classes are being conducted in other locations. Without some change, it is not clear whether coverage can be maintained as teaching duties are increased.

Conclusion

Collaboratively planning and presenting an information literacy program is as much about educating the teachers to a constructivist approach as it is about helping

students develop valuable knowledge and skills. The success of such a program is dependant on the development of strong professional relationships that allow for a true team approach in which each partner respects the other's expertise. With neither partner taking a lead or supporting role, not only is the integration of curricular and information literacy objectives maximized, the importance of both is emphasized. Students need to see this as a single project with multiple goals, not as a bunch of extra work piled onto a regular assignment.

With the initial implementation of the second stage of the information literacy education program at Vernon Secondary School, and with the support for the program from other departments, there are many signs that the program will be successful. Although such success is a difficult thing to define or measure, indicators would include positive impressions by participating teachers of the quality of student work, and a willingness of teachers to be involved in subsequent years. At this stage there have not been a sufficient number of groups complete the Social Studies 9 Native Cultures research unit to evaluate the program on these criteria. The experience of working with the first group, and participating in their presentations, seems to indicate that the level of engagement in the work and the quality of the products produced is sufficiently high to indicate that the curricular and many of the information literacy objectives have been met. A brief program evaluation discussion with the students and teachers involved should provide valuable feedback on aspects of the program that should be maintained and those that could benefit from some modification. By being receptive to the opinions of all participants, it is hoped that the program can grow to the point where all students are able

to develop their knowledge and skills so that by the time they graduate they are able to find, evaluate, and use information from a wide range of sources and formats for both academic and personal inquiries.

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Appendix A: Information Literacy Education Program Summary

Implementation	Grade	Subject Area	Information Literacy Skills
2003/4	8	Study Skills	• computer use • network use • library catalogue searching • library orientation • Dewey Decimal System • Internet searching
2004/5	9	Social Studies	• research model • use of a variety of sources • review and extend searching • note taking • minimum number sources and types • process journal
2005/6	10	Science	• review research model and note taking • highlighting • evaluation of sources • citations for direct quotes • Reference list
2006/7	11	Social Studies	• recognition of bias • review and extend evaluation of sources • review research model • minimum number sources and types • review citations and Reference list
2007/8	12	English	• self selection of topic area • recursive research and topic definition • issue or thesis-based inquiry • minimum number sources and types • citations also with paraphrasing

Appendix B: Reflection on Process Activity

<u>The Big Purchase Activity</u>

Outline:

1. Introduce - looking at the importance of process
   - put: Name, Date & Title on fresh page
   - Imagine that you have just finished saving enough money to buy the _____ (snowboard, guitar, horse, car, ...) that you have always wanted, and you want to make sure you don't blow it and buy junk. Jot down a list of steps that you would follow to find the best item to buy.
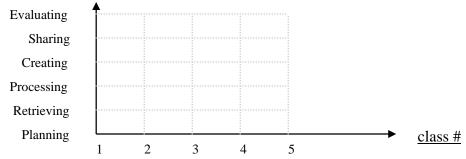

Name
Date

<u>My Big Purchase</u>

I want to buy a _____.

To make sure that it's the best I would:

1)
2)
3)
4)
5)
…

---

2. a few minutes to think and write

3. Put the categories: Beginning/ Middle/ End on the board or overhead

4. - have students give one of their steps
   - have class decide which category it belongs in

5. Discuss: - importance of steps being in an appropriate order & going back to a previous stage if a problem is encountered
   - feelings at each stage
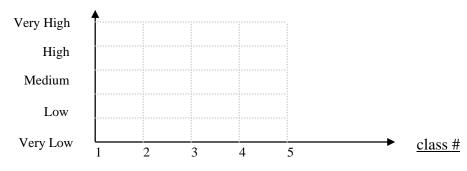
6. Relate to Stages in the Inquiry Model process

(Alberta Learning, Learning and Teaching Resources Branch, 2004, p. 42)

Appendix C: Process Journal

Name: _____
Block: _____

<u>Inquiry Process Journal</u>
Teacher: _____
Teacher-librarian: _____

At the end of each class your current
Dates: Class#1 _____
progress in the inquiry process should be
#2 _____
recorded using the following charts.
#3 _____
#4 _____

A) <u>Inquiry Stage</u> (circle all that apply, and
#5 _____
join the circles for each class with a vertical bar)

Evaluating
Sharing
Creating
Processing
Retrieving
Planning   class #
1   2   3   4   5

B) <u>Confidence</u> (circle the most appropriate one for each class, and join circles with a line)

Very High
High
Medium
Low
Very Low   class #
1   2   3   4   5

C) <u>Feelings</u> (circle the most appropriate one for each class, and join circles with a line)

Satisfaction
Confidence
Optimism
Uncertainty
Confusion
Frustration   class #
1   2   3   4   5