

PROFESSIONAL DEVELOPMENT AND THE
TEACHER-LIBRARIAN:
AN INTERNSHIP REPORT

CENTRE FOR NEWFOUNDLAND STUDIES

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**PROFESSIONAL DEVELOPMENT AND THE
TEACHER-LIBRARIAN: AN INTERNSHIP REPORT**

By

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**An internship report submitted to
the School of Graduate Studies
in partial fulfilment of the
requirements for the degree of
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ABSTRACT

The purpose of this report is to describe the results of an internship study of the role of the secondary school teacher-librarian as it pertains to the curricular integration of technology through staff development. Three basic questions were explored: (a) What do we know about educational change and staff development? (b) How does this knowledge relate to the curricular integration of technology in secondary schools, particularly as it pertains to the role of the teacher-librarian? and; (c) How do schools obtain funding for the curricular integration of technology?

Chapter One explains the rationale for the choice of internship setting, outlines the internship experiences, describes the evaluation and supervision procedures, and provides background information to the research component. Chapter Two is comprised of a review of the literature on educational change and staff development as it pertains to the curricular integration of technology. The results of this review indicate that staff development can be an effective vehicle for educational change when it is conducted at the school site, incorporating elements of the school vision, school culture, and the teachers' acquired knowledge of their professional practice. Transformational leadership appears to be an effective leadership style for educational change. Chapter Three describes the plan for technology implementation at Bishops College, the on-site multimedia research project, and the staff development program. This chapter

concludes with a description of the role of the teacher-librarian as observed at Bishops College and a discussion of the role of the teacher-librarian as a transformational leader within the school.

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CHAPTER ONE

Overview of the Internship

The Internship Setting

Bishops College, under the leadership of an award-winning administrator, has earned a reputation for developing innovative curricular and co-curricular programs for students. The school currently operates with two teacher-librarians assigned to the learning resource center. The first provides extensive knowledge and experience in both the traditional and contemporary roles associated with the learning resource requirements of the school; the second brings to the position his expertise in information technology. Along with providing the day-to-day learning resource services to teachers and students, this team is currently in the process of automating the learning resource center. In 1995, Bishops College became a fully networked school, with accessibility to the learning resource center and the Internet available from its classrooms. The learning resource team plays a key role in this process by facilitating the selection of appropriate hardware and software to support this networking, as well as providing training opportunities for the teaching staff.

This setting was chosen for the internship in order to provide opportunities to study and learn about the role of the teacher-librarian in staff development, particularly as it pertains to the curricular integration of

technology. Since our schools are increasingly seeking external funding for the acquisition and financing of technology, an additional goal was to learn about, and engage in, the preparation of funding proposals to external agencies.

Description of Internship Experiences

The internship was planned to provide a broad range of activities encompassing as many as possible of both the traditional (cataloguing, circulation, etc.) and contemporary (information technology, multimedia, etc.) roles associated with teacher-librarianship. Specifically, the experience included the following:

- (a) Library automation - cataloguing and circulation using the Columbia Program;
- (b) Selection and use of computer hardware and software;
- (c) Proposal writing - developing and presenting proposals for learning resource projects in educational technology (i.e. HRDA);
- (d) Advocacy strategies - how best to encourage all stakeholders in the school to utilize its learning resource services (parents, staff, schoolboard, business, students);
- (e) Curriculum - developing familiarity with the program offerings of the school;
- (f) Collection development - experience in routine decision making regarding weeding of the collection and the setting of purchasing priorities;

- (g) Student management strategies - how to effectively organize scheduled classes as well as groups and individuals who visit the learning resource center;
- (h) Internet use - location, evaluation and retrieval of research material from the Internet for both teachers and students;
- (i) Curricular use of resources - the selection and use of resources for multi-media lesson plans and/or student presentations;
- (j) Facilities planning - making effective use of the physical space in the learning resource center (floor plans, decor, etc.).

Method of Self-Evaluation

The goal was to develop competency in as many as possible of the indicated skills through a combination of actual practical experience and on-going consultation with my faculty supervisor and cooperating teachers. To provide an accurate record of my progress, and as a means of recording experiences, a daily log was kept. From time to time this record was discussed with my supervisors and their advice and feedback was noted.

On-site Supervision

The two teacher-librarians conducted joint supervision and evaluation throughout the period of the internship. To provide structure and clarity for this formative component, the internship experiences were categorized as

follows: (a) Work Experience in Learning Resources; (b) Teaching Experience in Language 2101; and (c) Professional Development Experience.

Work Experience included such activities as automation of the card catalogue, selection, weeding, budgeting, etc. Teaching Experience included assisting students as they learned research strategies using traditional print materials, as well as the Internet and CD-ROM. Professional Development experience consisted of the work associated with the research component of the internship, as well as participation in staff development activities at the school site. Formative evaluation was ongoing and interactive and was conducted largely through observation and discussion. Summative evaluation was also conducted by the two on-site supervisors, and in accordance with the regulations set forth by the Faculty of Education.

The Research Component

Since 1992, when Bishops College received initial approval to implement a three-phase Vision 2000 Model School Project, this school has been the site of several technology based learning resource research studies. Concurrent with this plan to implement the curricular integration of technology is a three-phase staff development project, part of which is presently in progress. In order to fulfil the research component of my internship, I assisted the learning resource

team in their work with staff development. In order to clarify the details of this assistance, a brief description of Bishops College as a learning resource site is useful.

The Vision 2000 Project has as its focus the creation of a Electronic School. The learning resource center, housing the main file-servers and CD-ROMS, forms the hub of a fully networked building. The networking phase of the plan has now been completed. During the Winter Term of the 1994-1995 school year, each classroom became capable of communicating directly with the learning resource center. Phase two of the plan, currently submitted and under review, involves the establishment of a Technology 2000 Lab. Students using this facility will be able to incorporate activity into virtually every aspect of their learning. Phase three proposes the creation of a video-conferencing/distance education center. Bishops College, as a model school, proposes to serve as a resource school for other schools in the province.

The teaching staff at Bishops College has demonstrated the willingness and commitment necessary to incorporate new skills into their teaching strategies. Several consultation processes and informal technology training sessions were completed. This was followed by asking each teacher to complete a self-assessment of her or his computer expertise. Teachers who were willing and capable of training other staff members were identified. The final phase would

involve the implementation of a school-based, peer-coaching/mentoring training model in which teachers who are novices in a particular area of technology will be matched with those who are masters.

The financial assistance required to make Vision 2000 a reality goes beyond the funding available from an individual school board. The Bishops College Plan is being effected through the creation of a Parent Advisory Committee, as well as the formation of educational partnerships with corporation and community and government agencies. Requests for financial assistance must be substantiated by well-researched written proposals. At Bishops College the role of the learning resource teachers involves sharing in the responsibility for developing these proposals.

During the period of the internship, the following basic questions were investigated: (a) What do we know about educational change and staff development? (b) How does this relate to the curricular integration of technology in secondary schools as it pertains to the role of the teacher-librarian? and (c) How do schools obtain external funding for the curricular integration of technology?

To answer these questions, a comprehensive review of the literature was conducted. Also, I gained practical experience by engaging, as a participant-observer, in the work of the learning resource center at Bishops College.

Specifically, I assisted with the research and design of phase three of the staff development proposal. I also participated in the writing of a funding proposal.

The research component, therefore, will consist of:

- (a) A literature review of educational change and professional development as it pertains to the curricular integration of technology;
- (b) A brief history of the implementation of technology at the internship site;
- (c) A description of the proposed staff training plan;
- (d) A report on the staff development program.

Limitations of the Report

During the period of the internship, I assumed the role of participant-observer in the learning resource center at Bishops College. Because my goal was to obtain professional development experience, I participated only in activities already ongoing at the school site. Approval from the Ethics Committee was neither requested nor granted since it was not my intent to collect data for either qualitative or quantitative analysis, and no such study was undertaken. This report contains a literature review and descriptive and reflective commentary on my internship experiences, as described above. Care

was taken to protect the confidentiality of all members of the school community.

Organization of the Report

In organizing the report, Chapter One is intended to introduce the reader to the goals and objectives of the internship, and to provide an overview of the report. Chapter Two is the research component, as required in the internship report. Chapter Three is a synthesis of critical reflections upon the whole internship experience, with a particular focus on implications for the learning resource teacher.

It should be noted that the experiential and reflective nature of the contents of Chapters One and Three dictates that these chapters be written in the first person. Chapter Two, the literature review, follows the conventions for a formal academic paper and is written in the third person.

CHAPTER TWO

Educational Change and Staff Development

Introduction

Hargreaves (1994) writing in Changing Teachers, Changing Times, states that "the rules of the world are changing. It is time for the rules of teaching to change with them" (p. x). Our present school systems are still geared to the norms of the industrial age (Faidley and Musser, 1991) where universal standards were imposed by a central authority and students and teachers were segregated into isolated classrooms and governed by rigid hierarchies. Education was conducted in an assembly-line, factory-like fashion. The industrial era was characterized by much more stability than the postmodern world of today. A student could expect to complete her or his schooling, train for a job, and hold that job until retirement, all without having to upgrade or learn new skills.

Today's students are a mere half decade away from the twenty-first century. The norms of the industrial age are rapidly losing world dominance (Toffler 1990). Students graduating from the schools of today may be employed in careers that have yet to be invented, such is the rapid pace of change in the dynamic and turbulent postmodern culture. Toffler (1990) argues that children born in the last few decades of the twentieth century have literally been born into the information age, while many of their teachers and their school systems

are still heavily rooted in the industrial era. Educational change, often referred to in the literature as the restructuring of teaching and of schools, is necessary. Restructuring will require, "A new mindset . . . beginning with critical inquiry into the needs of students of the information age" (Rowley and Stephen, (1991), p. 29).

Alvin Toffler, writing in Powershift, suggests that the most important commodity of the information age is knowledge. He describes the economy of the twenty-first century as a "knowledge economy" in which "the highest quality of power comes from the application of knowledge" (p. 15). In The Fifth Discipline, a book directed at systemic change in business organizations, Senge (1990) describes the ability to learn as "the only sustainable competitive advantage" available to citizens of the information age. Thus the concept of the teacher as a fountain of knowledge, sage on the stage and dispenser of facts is not viable in these rapidly changing times, since it is no longer possible for teachers to learn all they need to know prior to entering into the teaching profession. Equally anachronistic is the concept of a student as an empty vessel to be filled:

Teaching as telling, the model that has dominated pedagogy and the consequent organization of schooling to date, is being called into question as professional learning for teachers increasingly connects to an increasingly reconsidered view of schools. (Lieberman, 1995, p. 592).

A report to the Ford Foundation, Teacher Development in Schools (1985), advises that "a school is a social system, not just a collection of teachers, students, courses and classrooms" (p. 6). This advice is reinforced through the writing of Shanker (1990) and Sarason (1993) who advocate that the restructuring of schools involves a redefinition of the roles of the administrators, the teachers and the students. This redefinition involves the concept of the school as a learning organization whose occupants are engaged in a continual process of growth or life long learning. Lieberman (1995) continues:

Transforming schools into learning organizations in which people work together to solve problems collectively is more than a question of inserting a new curriculum or a new program. It also involves thinking through how the content and processes of learning can be redefined in ways that engage students and teachers in the active pursuit of learning goals. (p. 592)

The concepts of the school as a social system and the teacher and student as life long learners will be more fully developed at a later point in this literature review.

The teacher is seen as the direct link between the goals of the school system and the education of students. For this reason, and because the teacher is currently seen as the key to educational restructuring, it is necessary to review the role of preservice and inservice education in the development of teachers.

Teacher Development

Teacher development or staff development has been defined as all those processes which improve the job related knowledge, skills or attitudes of school employees (Sarason, 1993). Fullan (1991) adds that professional development is "the sum total of formal and informal learning experiences throughout one's career from preservice education to retirement" (p. 326). Staff development is recognized as crucial to improved student learning (Hawley and Rosenholtz, 1986; Joyce and Showers, 1988; Sparkes and Loucks-Horsely, 1990) as well as a major starting point on the agenda for educational reform (Hargreaves, 1994; Myrick and Jones, 1991).

The literature is replete with references to dissatisfaction with the results of preservice and inservice preparation for teachers. With reference to preservice education, but equally applicable to inservice education, Goodlad (1990) comments:

Teacher education may have been neglected, but it has not been ignored. Teacher education has suffered from superficial scrutiny and . . . inadequate understanding. Simplistic prescriptions have appeared and reappeared in reform reports since the 1890's. If the diagnoses behind these prescriptions had been correct . . . teacher education would be in good health today. It is not. (p. xii)

Other writers allude to the fact that preservice education has not yet

moved out of the mindset of the industrial age. Sarason (1993) advises that the organizations responsible for the teaching of teachers "should not teach conformity. They should teach a rationale for seeking and acting on change" (p. 203). Joyce and Showers (1988) conclude that preservice education "has not prepared teachers adequately for the lifelong process of professional development. Learning how to acquire good practices should be as important as good practices themselves" (p. 79).

Preoccupation with the inadequacies of preservice education has been cited as one of the reasons for the present dissatisfaction with teacher inservice (Johnson, 1980). Johnson traces the roots of the present need for attention to inservice education back to the late 1950's when "the Russian's launching of Sputnik set the education and scientific communities reeling" (p. 32). The reactive attempts at educational reform generated by the Sputnik event were legislated in a bureaucratic, top-down fashion from the national to the local levels (Goodlad, 1990). Curriculum consultants and planners designed standardized and teacher-proof texts and materials. Teachers were taken out of their schools and their classrooms, perhaps for one day or several days and 'trained' in new content and pedagogy. Staff development became an uneven effort of courses and workshops grafted into schools in the form of discrete, unconnected projects (Fullan, 1990).

More than a decade after the implementation of this massive inservice effort, research studies conducted among educators revealed nearly unanimous dissatisfaction (Sparkes and Loucks-Horsley, 1990). Despite large expenditures of time, energy and money, typical inservice methods continue to fall short of meeting the goals and expectations of stakeholders (Grossnickle and Layne, 1991; Miller, 1994). Sarason (1993) reports that traditional inservice attempts are sporadic, disorganized and lack a strong conceptual framework. Louden (1991), McBride, Read and Dollar (1994) and Watson (1994) attribute these flaws to a fundamental misunderstanding about the day-to-day needs of teachers in the workplace. Fullan and Hargreaves (1991) would agree:

There is much more to developing a teacher than learning new skills and behaviours. You cannot understand the teacher or teaching without understanding the person the teacher is. Teachers become the teachers they are not just out of habit. Teaching is bound up with their lives, their biographies, with the kinds of people they have become. (p. 25)

Teachers have been acknowledged as the greatest resource within a school, yet many inservice practices have relegated teachers to the role of "front row spectators rather than active participants in their schools" (Huddleson, Claspell and Killian, 1991). Improvement programs often have been imposed on teachers and often make more sense to the researcher than to the practitioner. The

authors of Teacher Development in Schools (1985) caution that "teacher development will have a limited effect unless knowledge is translated day by day into practice" (p. 19). With reference to the importance of considering the implications of inservice for the daily practice of teachers, Nias (1987) argues that "it is difficult to transfer experience gained away from the workplace, in the absence of many colleagues, back into the work setting."

Another malaise to be reckoned with within the reform of schools is the quick-fix, one-shot inservice syndrome (Sirotnik and Goodlad, 1988). Such standard, mandated experiences often ignore the professionalism (Burke, 1987) and acquired knowledge of teachers (Shanker, 1990). Inservice of this kind creates a sense of authority-dependency (Nias, 1987) and transforms teachers into deskilled, degraded, passive receptors rather than active creators of professional knowledge (Miller, 1994).

Professional development is rarely seen as an integral part of the job description of teachers (Fullan, 1991). Hence, administrators may view it a low priority item (McBride et al. 1994) and when it requires teachers to be away from class may even consider it as an infringement on the students' opportunity to learn (Shanker, 1990). Yet, Fullan (1991) contends that "teacher development and school development must go hand in hand. You cannot have one without the other" (p. 289). Goodlad (1990) writes that "during successive eras of

educational reform, the reform of schools and the reform of teacher education have rarely been connected" (p. 3).

Staff Development and the Curricular Integration of Technology

One of the most profound educational changes in recent years has been the implementation of computer technology in the school environment. Bailey (1991) suggests that technology is the only tool powerful enough to meet the demand for restructured schools. Pelgrum and Plomp (1993) write, "the question of how education should react to these developments and what role computers can and should play in schools is still an issue of major debate" (p. 101).

Recent research indicates that within the past decade the number of personal computers in our schools has increased steadily (Becker, 1993; Pelgrum and Plomp, 1993), yet this same research indicates that the mere physical presence of hardware and software does not necessarily indicate that it will be appropriately used, if used at all. Picciano (1994) discusses reports of computers sitting unpacked in closets or gathering dust in the back of classrooms "because the teacher does not know how to use them" (p. 152). Becker (1993) reports that only a small minority of teachers and students are major computer users. Lockhard, Abrams and Many (1994), in their discussion of the impact of microcomputers on education, write:

In no other case in the history of education has so much money been spent with so few questions asked, so little known about the implications, so little thought given to implementation, and ultimately so little expected in return. Schools competed with one another to acquire greater numbers of computers with little thought given to their actual use. (p. 386)

Current writers (Lockhard et al., 1994) indicate that the proper implementation of computers is "through an invisible integration into the curriculum" (p. 136). Maddux (1991) agrees that curricular integration is a realistic goal if computer use is to achieve its educational potential. He suggests that computer labs and curricular integration need not be mutually exclusive arrangements. In his opinion, several conditions must be met before the goal of integration can be appropriately achieved. Pedagogical issues must be addressed. Computing experiences must be coordinated across grade levels, so that a continuum of skills can be developed. New technologies must be evaluated and their attributes assessed in the light of previously established curricular objectives. The focus must go beyond a computer curriculum, which tends to treat educational technology as a separate content area, to an emphasis on what should be done educationally through technology. He states that at present, "there are not enough computers and peripherals, . . . and not enough computer literate teachers to permit widespread, thoughtful and beneficial integration aimed at achieving important educational goals" (p. 39).

Roblyer, Castine and King (1988) report that "revolutions have a way of mandating change while glossing over the logistical details of how to implement that change. Such has been the case with the Microcomputer Revolution in education during the last ten years" (p. 131). One of the logistical details indicated by Roblyer et al is the role of the classroom teacher. Mann (1994) suggests that the majority of teachers have had less than a decade of experience using technology in the classroom. While many teachers have attended mandatory inservice sessions, Wiburg (1994) and Picciano (1994) note that such one-day approaches are ineffective, inefficient and have been shown to be of no long-term use to teachers. Becker (1993) indicates that only a small number of teachers are major computer users. While schools have acquired a great deal of computer equipment during the past decade, its effectiveness in the classroom is questionable. Picciano (1994) describes the process of bringing technology to the classroom as inefficient, poorly planned and chaotic: "Problems such as curricular integration and staff development remain. Careful planning would . . . more clearly define these problems and provide alternatives for their resolution" (p. 10).

Hickey (1993) reports on a study of 16 schools in the midwestern United States. She determined that teachers are not making reasoned decisions about how and when computers will be used. Computer use seems to take place

sporadically, even capriciously, "There appears to be few attempts by teachers to plan instruction that permits all children to take advantage of computers as part of the everyday curriculum" (p. 226). Hickey suggests that it is imperative for teachers to become familiar with the current issues and trends pertinent to the use of technology in education. She recommends computer literacy training, assistance in software selection and evaluation, guidance in curriculum integration and "ongoing support in the form of inservice and staff development" (p. 227).

Lockhard, Abrams and Many (1994) suggests that a lack of teacher training is one of the major obstacles to achieving the goal of computer integration in our schools. Pelgrum and Plomp (1993) support this point and add that the slow progress towards integration may be due to lack of time to prepare computer assisted lessons, compounded by a lack of sufficiently high quality software. They recommend both short-term and long-term staff development strategies.

Ellis (1992) reports that there is considerable resistance on the part of many teachers to the whole idea of using computers in the classroom, "either from computer phobia or a perceived threat to their jobs" (p. 74). Teacher attitudes and fears must be addressed when planning staff development. Dyrli and Kinnaman (1994) indicate that the rapid development of information technologies will change the roles of both teachers and students. Teachers will serve increasingly as managers of instruction rather than information providers.

Due to the increasing presence of technology in homes and communities, student competence in some applications may exceed that of their teachers. This will result in teachers learning to learn along with their students as well as in increased peer coaching by students. The new classroom management skills associated with increased student use of computers is a serious concern of teachers (Picciano, 1994; Sandholtz, 1992).

Becker (1993) writes, "unless teachers become advocates of change, innovations tend to be implemented pro-forma, if at all" (p. 145). Ellis (1992) and Kinnaman (1994) suggest that the human factor is of major importance in any technology oriented staff development program. Sustained and substantial efforts in the form of modelling, peer coaching, mentoring, and experimentation are needed to encourage teaching staff to recognize and welcome the teaching opportunities presented by technology (Kinnaman, 1994). Simply exposing teachers to technology is not sufficient to allay fears or to encourage computer use in the teaching process. Becker (1993) reports that exemplary computer-using teachers are found in schools where there is organized, systematic, ongoing support for teachers in the form of staff development activities held at the school site. Zorfass (1993) and Willis (1993) indicate that teachers need a strong knowledge base, access to ongoing, on-site professional development, technical assistance and the opportunity to collaborate and communicate with colleagues

on a regular basis.

A cross-national study conducted by Pelgrum and Plomp (1993) described the status of teacher inservice as "focused on application courses, computer science, and programming activities" (p. 112). There was little emphasis on the pedagogical and instructional aspects of computing. November (1993) indicates a possible explanation for this type of training: "Part of the reason staff development too often stops with training and never moves on to the important education/thinking level is a lack of respect in the professional culture for the teacher as lifetime learner" (p. 16).

Reinen and Plomp (1993) report that teachers who are provided with a pedagogical and instructional orientation to technology use computers much more often than those without such training. Staff development is seen as a basic and necessary component of the continuing education of teachers and administrators as they extend their professional or technical knowledge. Reinen and Plomp (1993) argue that, "systematic staff development is an important aspect of an effective school. Staff development and training is one of the factors that determine the success of implementing an innovation . . . such as the use of computers in education" (p. 149).

Ragsdale (1988) discusses four problems associated with technology integration through teacher development. The first is the notion of computer

literacy for teachers, and presents an argument that literacy means different things to different teachers and therefore may be part of the problem, not part of the solution to teacher development. Teacher motivation is the second problem he addresses, since, he argues, some teachers view the educational demands of computing as quite unrealistic and with very little payoff for them. The third problem is a lack of formal training in pedagogical or evaluation skills, which may cause some novice computer-using teachers to "become so caught up in the thrill of the task . . . that they forget their critical evaluation skills" (p. 228). The final problem Ragsdale sees is that the multiplicity of suggestions for computer use in education has caused teachers to become confused about their developmental needs. Ragsdale considers the question of values in educational computing to be of prime importance, "The values component is often an important determiner of why people support or reject the use of computers in general, in education, or for other specific applications" (p. 229).

Ragsdale (1988) also discusses four frequently proposed solutions to the teacher development dilemma: pre-service education, in-service education, graduate instruction and research. While he argues that all approaches have individual merit, each is also limited in what it can offer to teachers. The research process itself, while highlighting the positive and negative aspects of computer use by teachers, has failed to provide major input into the courses for

pre-service and in-service education. Graduate courses, according to Ragsdale, are not an alternative to pre-service or inservice education.

The staff development approach promoted by Picciano (1994) assumes that such development will occur as part of a district wide plan, with participation by educational leaders such as superintendents and principals. Picciano (1994) states that an extremely powerful example is set when a school leader participates in staff development or when she or he begins to utilize some new technology. As educational leader in the school, the example set by the principal plays a central role in establishing the framework and climate within which educational goals are achieved. Such administrative practices go beyond lip service to include active consideration of the time and energy demands made of the staff, appropriate student-to-computer ratios, equity of access to computers across categories of students, and creation within the school of a social network of computer-using teachers.

School Culture and the Total Teacher

Current research in transformational leadership, power relationships and business management has helped to initiate a more comprehensive approach to teacher development. Current research findings on the nature of the teacher as a person and as a learner (Lieberman, 1995), the culture of the school (Norris,

1994), and educational reform (including power relationships in schools) have all contributed to the emergence of teacher-centered, site-based models of staff development. Goodlad (1990) describes these new models as part of a second wave of educational reform which began in the late 1980's when legislators and educational planners began to realize that, "the school had to be restructured and the hope lay in empowering teachers at the site and . . . infusing the whole with concepts of efficient management drawn from the business world" (p. 13).

Hargreaves (1994) suggests that the creation of a collaborative culture within a school is the cornerstone for improvement and change. A collaborative culture would capitalize on the collective expertise of all teachers, and when fully evolved, would replace the individualistic culture created by inflexible scheduling systems which force teachers to work in isolation in individual classrooms.

To capitalize on the collective expertise of all teachers is the challenge of staff development for continuous school improvement, according to Fullan and Hargreaves, (1991). They argue for schools which value, develop and support the collective expertise of all teachers, reflected in what they term "interactive professionalism" (p. 63). They suggest that at the heart of interactive professionalism is a redefinition of the role of teachers and the conditions under which they work, that this is the key to sustaining and motivating good teachers throughout their careers. Interactive professionalism takes place within a

collaborative work culture and entails the following general features:

- Teachers as a group are allowed greater powers of discretion in making decisions with and on behalf of children they teach.
- Teachers make these decisions with the help and support of their colleagues.
- Joint teacher decisions extend beyond sharing of resources and ideas . . . to critical reflection on the purpose and value of what teachers teach and how.
- Teachers are committed to norms of continuous improvement where new ideas are sought inside and outside the school setting.
- Teachers are more fundamentally accountable as they open their classroom doors.
- Teachers achieve greater mastery, efficacy and satisfaction in the profession of teaching. (Fullan and Hargreaves 1991, p. xiii and p. 63)

Sparks and Loucks-Horsley (1990) have attempted to organize and describe current knowledge about effective staff development practices. Their five models of staff development illustrate some of the specific practices which might be encompassed under the umbrella of interactive professionalism. While each model will be presented and discussed as an individual unit, it should be understood that their underlying theories and assumptions are not mutually exclusive. The models have been given the following titles.

- Individually Guided Staff Development
- Observation / Assessment
- Development / Improvement Process

- . Training
- . Inquiry (p. 235)

Individually guided staff development allows teachers to undertake a personal assessment of their own needs, set their own learning goals, and engage in appropriate self-selected learning activities. The key characteristic is to empower individual teachers to design their own learning. Specific practices might include reading professional journals, conducting library or empirical research, discussions with a mentor or group of colleagues or choosing to attend a specific workshop or conference.

The observation/assessment model reflects an effort to reduce the isolation felt by teachers who work on a daily basis in individual classrooms. The title of this model is not in any way a reference to summative evaluation. The premise of this model is that when teachers become comfortable observing, analysing and discussing each others' practices, the ensuing reflection and discussion can be a powerful means of professional growth for both the observed and the observer. Specific practices include instruction in systematic observation techniques, peer coaching, clinical observation by peers, pre-observation and post-observation conferences.

The development/improvement process of staff development assumes that "people working closest to the job best understand what is required to improve

their performance" (Sparkes and Loucks-Horsley, 1990, p. 239). Teachers acquire important knowledge and skills through their involvement in the problem-solving processes associated with school improvement and curriculum development. Specific practices would include serving on discussion groups and committees, conducting surveys and brainstorming sessions in order to identify specific problems, writing reports and creating agendas which address necessary modifications to school or district policy.

The training approach to staff development assumes that teachers are willing and capable of modifying their classroom management strategies, their knowledge, attitudes and instructional skills. The model relies on a learning to learn approach to skill development, supported by peer observation and coaching. Specific practices might include teacher participation on planning teams, exploration of various training approaches, participation in demonstrations or simulations of a new instructional strategy, such as cooperative learning.

The inquiry approach is grounded in the belief that teachers are intelligent, inquiring individuals with legitimate expertise and important experience. It supports the assumption that teachers have the ability to "formulate valid questions about their own practice and to pursue objective answers to those questions" (p. 243). Specific teacher-initiated practices could

include training in research methodologies, formation of collaborative research teams, leading to action research in the form of data gathering and analysis. Another form of inquiry has been described as "reflective conversation" (p. 244), in which groups of teachers carefully observe a practice, review related information, thoughtfully consider the whole, and make recommendations.

Sparkes and Loucks-Horsley present their findings with the caveat that while these approaches to staff development are currently becoming widely accepted and appear to hold much promise, a sound research base for their effectiveness does not yet exist. With the exception of the training model, the effectiveness of the other approaches is based largely on perceptions and self-reports. This is not to suggest that the models lack merit, for as Fullan and Hargreaves (1991) write, "it is through informed experiments pursuing promising directions and testing out and refining new arrangements and practices that we will make the most headway. Therefore *action* in trying out new approaches is imperative" (p. 63). Not only is it imperative that new approaches be tried, Sarason (1993) adds that "teachers have a moral responsibility to advocate change" (p. 127). Fullan (1993) suggests that educators must see themselves, and be seen by others, as experts in the dynamics of change.

The Teacher as Life Long Learner

The ability to become an agent of change, rather than a victim of it, to capitalize on the dynamics of the change process, is best fostered through the reconceptualization of professional development as a career-long process (Lieberman, 1995). Career-long professional development can be nurtured and sustained in the home school through the practices associated with interactive professionalism. As noted earlier, in-school collaborative practices reduce teachers' isolation from each other, but the concept of career-long teacher development must extend beyond classrooms and school buildings.

Darling-Hammond and McLaughlin (1995) suggest that part of the process of significant educational change is for teachers to form collaborative professional relationships both outside and within schools. Examples of such relationships might include the following:

- . School/university collaborations engaged in curriculum development, change efforts or research.
- . Teacher-to-teacher and school-to-school networks
- . Partnerships with neighbourhood based youth organizations.
- . Teacher involvement with regional, district or national activities. (p. 599)

They conclude that "such activities create new lenses for examining practice, while building the norms of the profession" (p. 599). Fullan and Hargreaves

(1991) present a series of guidelines designed to help schools develop interactive, professional cultures. Central to these guidelines is the teacher as career-long learner. They suggest that the single distinguishing characteristic of the best professionals in any field is that they "consistently strive for better results and are always learning to become more effective, from whatever source they can find" (p. 82).

The Role of Administrative Support

Teachers and students do not work in a vacuum. Administrative practices at both the building level and the district level can be "a powerful source of help or hindrance to the creation of a collaborative school culture" (Fullan, 1991). The district office has the responsibility to oversee curricular development and implementation in the context of the larger system of education. Through its ability to dispense rewards and sanctions, the central office can become a powerful moulder of norms and expectations. A policy which reflects top-down control, or which encourages and supports only one particular model of teaching, will serve to discourage innovation at the school level (Joyce and Showers, 1988). The principal, because of her or his interactive relationship with teachers and students, and because of her or his role as liaison between the school and the district office, is a crucial figure in the process of educational

change (Fullan, 1993).

The pace, the complexity and the pervasiveness of the current changes in education will require a shift in the traditional view of the principal's leadership role. If professional development is to result in the empowerment of teachers, then the traditional view of an omniscient, omnipotent principal who makes decisions and directs a powerless, passive staff will no longer work. Senge (1990) sees the leaders of the future as using a more subtle approach, as they work along with others towards the goal of building a learning organization.

Much literature exists describing the role of the principal as a facilitator of educational change. A key requirement is that the principal understand the change process itself, the effect that change has on the teaching staff, the relationship between change and the existing school culture, and perhaps most importantly, how to use the role of principal to empower and transform all members of the teaching staff (Fullan and Hargreaves, 1991).

A principal who practices leadership for change needs to understand that restructuring is a process, not a product with a definable endpoint (Watson, 1994). Although change can be mandated, this does not mean it will be implemented by teachers. People change when they perceive a need to change, not when someone else decides that the time is right. Successful leadership for change involves creating an environment in which teachers individually and as

a group, will be encouraged to develop and articulate a need for change. For such an environment to be nurtured, the principal must understand the culture of the school (Grossnickle and Layne, 1991). Norris (1994) expresses this viewpoint, "by understanding the culture existing in schools, linking with the cultural network, meeting the needs of teachers, and continually modelling and articulating the emerging vision of the school, leaders can shape the school culture towards continuous improvement" (p. 2).

Louden (1991) adds that in order to better shape the school culture, administrators must respect the role of continuity in teachers' work. In his words, "we must respect the traditions of teaching within which teachers have worked. We must accept the power of the past in shaping the future" (p. xii). While principals must understand the powerful influence of culture in shaping what happens within a school, Hargreaves (1994) argues that they must guard against the development of a school culture which is "contrived" (p. 195) or "balkanized" (p. 212). In a contrived culture, teachers would become overly dependent on bureaucratic control; while in a balkanized culture, staff cohesiveness would be undermined by separate and competing groups of teachers.

It is therefore necessary for principals to respect and understand the needs of teachers. This leadership attribute is well supported in the literature.

Hargreaves (1994) concludes that attempts at teacher development and educational change will meet with little success "unless they engage with the purposes of the teacher, unless they acknowledge the person that the teacher is" (p. 236). Nias (1987) and Louden (1991) concur that "teaching is a personal activity, shaped by individual perceptions and perspectives, and that teachers . . . bring to their work a sense of self, the preservation of which is of greatest importance to them" (Louden 1991, p. xii). Other literature deals with what Huberman (1991) refers to as life cycle effects on teachers needs. Burke (1987), for example, writes that "teachers exhibit different needs at different times in their professional lives. These needs prompt a differentiated approach to staff development" (p. vii). Clearly then, the principal must be seen as a leader who models understanding and concern about the personal feelings and needs of teachers.

As a nurturer of change, the principal must also be able to continually model and articulate the vision of the school. Grossnickle and Layne (1991) suggests that several visions may be preferable to one single vision in order to guarantee flexibility when faced with rapidly changing times. The vision of the school must be shared and articulated by the entire staff. In order to reinforce commitment to the shared goals of the school, the principal must be seen to model the practices which would contribute to the achievement of those goals.

For example, if interactive professionalism is a priority, the principal would need to support this goal by creating a flexible scheduling system, allowing time for mentoring, peer-coaching and reflective thinking.

If teachers are to be empowered, if their knowledge and expertise is to be recognized and utilized, then leadership for change would involve changing the power relationships within the school (Miller, 1994). This is achieved through the delegation of both responsibility and accountability (Tewel, 1991), the involvement of staff in decision making (Sarason, 1993), and the openmindedness to support staff initiatives which involve risk-taking and experimentation (Myrick and Jones, 1991). It can be seen then that the principal of a restructured school in which all teachers may be leaders in their own right must be less of a traditional leader and more of a facilitator of change. This type of leadership has been researched and written about extensively. It is known as transformational leadership, or leadership for change. Brown (1993) summarizes transformational leadership in this way:

It is about vision and working with others. It is about respect for people and allowing and encouraging the work of others. It is concerned with influencing people to work willingly for group goals. It is not as much concerned with the power of the leader as it is with empowering others. It is concerned with growth rather than control. It is shared leadership, where school leaders, with or without formal leadership roles, use various strategies

to change the culture of the school in school improvement efforts. (p. 19).

Conclusion

Staff development - previously delivered as a one-shot, legislated, prescriptive addition to the teacher's workday - is now perceived to be an effective vehicle for educational reform. One of the most profound educational changes in recent years has been the introduction of computer technology into the school environment. The curricular integration of technology has not yet had the anticipated impact on student achievement. This lack of impact may be attributed to inadequate staff development practices. Current trends in staff development promote the development of a site-based, peer-coached, career long model, incorporated into the long-term vision and culture of the school. The value of teachers' acquired knowledge or professional practice is also acknowledged as fundamental to effective professional development.

This recent emphasis on individual school culture, values and vision has led to the emergence of the transformational style of leadership as effective leadership for educational change. This style of leadership leads to the decentralization of formal power relationships and enables the empowerment of ordinary individuals, resulting in opportunities for informal leadership roles to develop among the teachers in a school.

CHAPTER THREE

Critical Reflections

Introduction

The goals of this internship were: (a) to observe and eventually exercise some of the professional responsibilities associated with the role of the teacher-librarian; and (b) to gain perspective on the theoretical component of my programme. The list of professional experiences to be included with this internship was organized under three categories: (a) work experiences; (b) teaching experiences; and (c) professional development experiences. During the period of the internship, all goals were met. Under the mentorship of my on-site supervisors, I feel that I have gained competence, confidence, and a concept of the role that goes well beyond my previous vision. I have gained invaluable professional development experience.

In this section of the report, I will describe the technology implementation plan and the multimedia research project currently ongoing at Bishops College. This will be followed by a synopsis of the staff development program. I will then describe the role of the teacher-librarian as observed at Bishops College. To conclude this chapter, I will discuss the role of the teacher-librarian as a transformational leader within the school.

The Implementation of Technology at Bishops

Bishops College has earned a reputation for developing innovative curricular and co-curricular programs for its students. Students attending this school now work in one of the most technologically-rich educational environments in the province.

The plan to integrate technology seamlessly into the curriculum began with the incentive of the Parent Advisory Committee in 1992. This group, with the support of the staff and administration of the school, developed a vision of Bishops as an electronic learning center. Cognizant of the rapidly changing world encountered by today's high school graduates, the committee set out to plan a school which would result in improved educational effectiveness, higher student achievement and technical literacy. Thus the Vision 2000 Model School Project was created, in partnership with the Bishops Parent Advisory Committee, The Canada/Newfoundland Human Resource Development Agreement (HRD) and local businesses.

Phase One of the Model School Project received approval and was completed in the second term of the 1994-1995 school year. This phase consisted of developing a local area network within the building, with the main file servers and CD-Roms located adjacent to the Learning Resource Center. This network has the capability for data, voice and video transmission. With computers

already present in the Learning Resource Center and in approximately half the classrooms, many students may now access the electronic research materials without leaving their own classrooms. In the near future, every classroom in the building will become a node on the Bishops network.

In addition to the school-wide network, students at the school have direct access to the World Wide Web through the Bishops Colleges web server, Baron2. They may also telnet directly to Susie, the student computer at Stem ~ Net. Students may use their retrieved information to complete traditional print-based research projects, or they may choose to use presentation software and present their findings electronically. An increasing number of students are choosing to present information through the creation of home pages on the World Wide Web.

Phase Two of the Vision 2000 Project envisions an extension of the number of computers in the school and possible student access from home.

Phase Three of the project would see Bishops College serving as a resource school for other schools in the province, using technology to pilot province-wide classes through video-conferencing and distance education.

Multimedia Teaching Strategies

In addition to acquiring and implementing technology for student use,

Bishops College has been granted funding to support a research project designed to study multimedia teaching strategies. This project, conducted jointly with Memorial University, is based in the learning resource center at Bishops College. The focus of this project is to promote resource-based learning through the investigation of teacher preparation and curricular use of multimedia lesson plans. While the teachers and students at the school will serve as the initial subjects of the study, the results are intended to be made available for province-wide use.

Bishops College Staff Development Program

Since 1992, when Bishops College received approval to implement a three-phase Vision 2000 Model School Project aimed at achieving the seamless curricular integration of technology, a staff development program has been ongoing. This program, based on the model proposed by Willis (1993), consists of broadening experiences and exploration activities, planning and consultation, just-in-time training and ongoing support. The staff development process is managed by the school's professional development committee. Members of this committee included the teacher-librarian and four other teachers.

The plan is designed to meet the individual needs of teachers while, at the same time, drawing upon the skills which presently exist within the staff.

Broadening experiences and exploration activities during 1994-1995 included a series of sixteen informal workshop sessions, organized by the learning resource teachers and conducted by staff members. These were held during the eight day exam block at the end of the first term. Teachers attended these on a voluntary basis. As soon as the installation of the local area network was completed, training sessions were held on a more formal basis during a schoolboard-approved full day workshop. During these sessions, teachers became familiar with the technology and password protocols associated with the network and explored the curricular possibilities of the computer.

A consultation process involving staff, school administration and school board members was designed to identify the technology skills necessary to operate in the proposed electronic school. The required skills included word processing, file management, internet skills, the creation of home pages, and the creation of electronic presentations. The consultation process was followed by asking each teacher to complete the first of a series of technology skills self-assessments (See Appendix A). This first assessment, which dealt with Internet skills, was collated by the various department heads. The results of the assessment were used to identify at least one staff member from each department who would be willing and capable of training fellow staff members. Those staff members who emerged as trainers agreed to attend a Saturday training session

at which they learned to create home pages for the World Wide Web. It should be noted that both the principal and vice-principal participated in all staff development sessions.

Support mechanisms, such as mentoring and peer coaching, are continually in evidence at Bishops College. As yet there has been no formal assignment of novice to master, but the learning culture appears to be such that each staff member is aware of the other's expertise. It is common practice for one teacher with a computer problem to request and receive assistance from another. This is in keeping with the just-in-time training model.

Once teachers become comfortable with the technology and acquire the confidence to begin curricular integration through various projects, it is believed that an on-site training center, consisting of several computer workstations, training videos, and professional reading material, would be instrumental in the further development of interest and expertise. A proposal for such a center was presented to the Avalon Consolidated School Board during the winter term. Due to other school board priorities, approval for the center has been delayed.

Without the site-based training center, the professional development committee is now in the process of rethinking the staff development process. It is believed that the peer coaching and mentoring currently ongoing will continue to be a major strength of the training model. Another feature of the

plan, and intended to be used in conjunction with peer support, is the development of a series of brief training exercises presented in brochure format and placed near the computers. (See Appendix A for sample training brochures).

Bishops College is a dynamic and energetic school. It appears that the staff has a talent for implementing, adapting to, and thriving on change. Professional development for such a group must be based on the structure provided by a long term vision, yet must be flexible enough to evolve through inevitable unforeseen events.

The Role of the Teacher-Librarian at Bishops College

At Bishops College, both teacher-librarians form the teaching unit for the Language 2101 course. This arrangement is in keeping with two major components of the vision of the school: ongoing site-based staff development in the curricular integration of technology, and a focus on developing the information literacy skills of students. The presence of two teachers in the Learning Resource Center allows for a great deal of flexibility in the performance of teaching assignments. Each teacher is familiar with the work and progress of the other's students. Team teaching is conducted so smoothly that on many occasions it was a challenge to remember whose class I was assisting. The flexibility of this arrangement also allowed for one teacher to deliver just-in-

time staff training at any time during the day while the other continued with the class. Another advantage of role-sharing is the ready availability of a mentor.

To meet current expectations, the contemporary learning resource teacher must possess not only the relevant academic qualifications, but strong interpersonal skills as well. The teachers in the Learning Resource Center at Bishops College must communicate effectively with students at all grade levels and all levels of academic skill. They must be thoroughly conversant with the resource requirements of each course offered at the school. As leaders in staff development, they must possess a high degree of credibility with each member of a diverse and talented teaching team.

As key players in the school's quest to become an electronic learning center, the learning resource teachers at Bishops College are expected to research and develop funding proposals. (See Appendix B for a summary of guidelines and sample application form). These proposals must be presented and defended to such varied audiences as the school administration, the parent advisory committee, school board personnel, business partners and government agencies. As has been the case at Bishops, the successful presentation of such proposals has resulted in media coverage of curricular innovations. Both have been the subjects of several videotaped interviews, at which they displayed skill in communicating the goals of the school to the general public.

Current research on staff development emphasizes the importance of the teacher as lifelong learner. With the learning resource teachers with whom I completed my internship, this concept is modelled routinely as an integral part of daily activity. In order to provide effective service to all clients of the learning resource center, it is imperative to keep abreast of current thinking and new developments in instructional methodologies, course offerings, and research on teaching and learning styles.

Because of the focus on the development of information literacy skills through the curricular integration of technology, a commitment to lifelong learning is virtually mandatory. The nature of technology is such that there is always something new to be learned. Technology is impacting on the teacher-student relationship to the point that, on occasion, a role reversal may occur, with the teacher receiving instruction from the student.

The presence of technology in the school provides the opportunity and motivation to explore, develop and implement innovative instructional and evaluation strategies. As models of lifelong learning, learning resource teachers must be willing to take calculated risks in such exploration and development. They must then be willing to share and promote any new-found knowledge.

It is evident that the learning resource teachers at Bishops College have accepted (or perhaps created for themselves) a many-faceted set of responsibilities.

They must, at times, act as clerks and technicians – circulating, cataloguing, weeding and ordering resources. They must be effective at proposal writing, collaborative planning, staff development and public relations. They must possess sufficient versatility to accommodate perhaps as many as three different classes, along with their teachers, in the Learning Resource Center in the same time slot. Clearly, they do not fit the stereotyped view of the teacher-librarian as a staid manager of a repository of books, nor do they experience the dilemmas of advocacy so often depicted in the literature.

It is clear, as well, that this team is skilled in the setting of priorities for their job-related responsibilities. Responsibilities to the students they teach, and staff requests for resources and/or assistance with technology integration, take priority over weeding, reshelving and overdue notices. As evidenced through observation of the time, energy, and enthusiasm which these teacher-librarians put into their professional endeavours, one can conclude that they view the duties associated with their role as more than just a job.

In keeping with their involvement with teachers and students on a school-wide basis, both teacher-librarians are members of a number of committees at the school, school board and community level. Their involvement serves the two-fold purpose of promoting the vision of the school within the community, and of bringing developments within the community into the curriculum.

As I became familiar with the literature on educational change and transformational leadership, I began to develop an understanding of the dynamics of Bishops College, the visible empowerment of the teaching staff, in particular the empowerment of the learning resource teachers. The principal of Bishops College envisions the school as developing into a model school for the entire province. Not only is the school a leader in the curricular integration of technology, Bishops College is also notable for creating a high profile for the role of the learning resource teacher.

The Teacher-Librarian as Educational Leader

Much of the literature of the 1980's alluded to a possibly pessimistic future for the role of the learning resource teacher. As schools become more involved in the changes necessary to move into the twenty-first century, I believe that a properly prepared learning resource teacher could be in a position of great influence. Along with the requisite academic qualifications and technical requirements, proper preparation would include a knowledge of the change process, the principles of transformational leadership, the importance of vision-building, the influence of school culture, and the realization that the heart of educational change is the individual teacher. Add to this list a knowledge of learning styles, instructional strategies, the principles of staff development,

technology and media skills and you have an individual with formidable empowerment potential.

Barker (1994) writes that as teacher-librarians we must become more conscious of our potential for influence as change agents. Our teaching responsibilities require that we work collaboratively with virtually every teacher in the school. Our responsibility to promote the vision of the school requires that we work in close contact with the administration. This provides the opportunity to develop a liaison role. It is possible that an active teacher-librarian may be more knowledgeable about the school culture than would be the school administrators whose responsibilities are more broadly based. The teacher-librarian could then be in a position to interpret the goals of the school to the teaching staff.

Transformational leadership has often been described as leadership for change. One of the basic principles of such leadership is its potential for the empowerment of all individuals involved in the change process. Blanchard (1994) describes the skill of empowerment as the art of "getting [people] to want to perform rather than making them perform" (p. 34). In essence, effective transformational leadership brings out the leadership potential in each person. Burdenuk (1992) suggests that an essential competency for the modern teacher-librarian is an understanding of the nature and use of power. In his opinion, the

teacher-librarian possesses two important power bases. Burdenuk describes the teacher-librarian's acquired knowledge, skills and curriculum expertise as a source of expert power. This, combined with referent power-strong interpersonal and communication skills, positions the teacher-librarian as a transformational leader.

Research has shown that effective schools are those which have developed a collaborative culture. The teaching staff does not work in isolation. The practices of interactive professionalism, mentoring, modelling, peer coaching, team teaching, and reflective practice are an integral part of daily routine. The teacher-librarian is in an ideal position to foster, through transformational leadership, the practices of interactive professionalism. This work requires collaborative planning with teachers, on a daily basis, with individuals or small groups. Knowledge of the staff provides teacher-librarians with an opportunity to put teachers in touch with each other as coaching or mentoring teams. Teacher-librarians are also in a position to provide ongoing support and encouragement to teachers as they implement a new technique.

An effective leader understands that educational change is perceived by many teachers as intimidating and threatening on both a personal and professional level. An effective leader realizes that instead of mandating change, a climate of acceptance must be created. The processes of vision-building, vision articulation, and role modelling by the leader help to create this climate. Again,

teacher-librarians, through modelling and mentoring in their personal contact with teachers, can assist in creating the conditions necessary for them to develop a positive outlook towards change.

A major factor in creating opportunities for the staff to accept change is appropriate staff development practice. Through their work with teachers in the selection and evaluation of resources, the planning of instructional strategies, and inservice sessions in new curricular trends, learning resource teachers are participating in staff development. Learning resource teachers have learned to respect individual differences among teachers and are comfortable in acknowledging the skills and professionalism of each one. Learning resource teachers, again because of their close working relationship with teachers, are in a position to offer personal, as well as professional, support. Generally the curriculum support provided to teachers by the teacher-librarian has been site-based, need-based and delivered upon request. This approach, a standard for teacher-librarians, closely parallels the emerging trends in staff development for educational change.

We cannot hope to develop effective schools by looking at isolated components of the education process. The roles of teachers, students, and administrators must be treated as a synergistic or ecological (Oberg, 1990) whole, with changes in the behavior of one resulting in changes in the behavior of the

other. If the school administrators adopt the transformational model of leadership and through flexible scheduling, personal and professional support, convey the message that teamwork, sharing, and risk-taking are acceptable ways of developing new knowledge, then the staff might be more open to work in this way, and the teacher-librarian will be better able to work along with them. Such an approach to learning will set an example for students, leading them to perceive that learning is a continual lifelong process. The principles of collaboration and collegiality routinely practiced by teacher-librarians are ideally suited to the creation within the school of a learning organization which encompasses both teachers and students.

Schools have always been part of a larger community context. Educational change is always preceded by changes at a broader social level. This fact creates the need for a vision of education which extends beyond the level of the learning resource center and the school. The learning resource teacher would benefit by developing partnerships with individuals, institutions, organizations and agencies within the community, thereby opening up new avenues of information and communication and new ways of learning.

The training and competencies expected of a teacher-librarian a decade ago are vastly different than those promoted today. Information technology is revolutionizing the teaching and learning process. Learning in the 1990's may

be promoted through resource based, interdisciplinary, or co-operative approaches. Metacognitive research has provided us with new information on learning styles and multiple intelligences. Research has shown that teachers are able to create their own professional knowledge through reflective practice and action research. A teacher-librarian who hopes to offer good service to a school must adopt professional development as part of her or his job description.

To be an effective teacher-librarian requires awareness, preparation, vision, and a commitment to career-long learning. In this paper, I have chosen to discuss the role of the teacher-librarian as transformational leader. This is not intended to diminish the specific professional knowledge needed to be effective in the role, but rather to highlight this form of leadership as a skill which transcends the other types of competencies and enables the teacher-librarian to work with and motivate others.

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APPENDIX A

Sample Staff Development Documents

Bishops College Staff Training Plan (Brief version)

Staff training is most effective when delivered “On Site”, “Just in Time”, and linked to the existing curriculum needs. These factors have played an important role in the shaping of our staff development program.

Bishops College is already well into the development of a staff development program. The staff development program for technology integration is divided into five stages:

Broadening Experiences:

This stage involved introducing teachers to the potential of the curricular integration of technology and generally exploring its possibilities. Activities at this stage include general discussions at staff meetings; presentations by staff members and outside resource people and provision of current journals and videos.

Exploration Activities:

This involves working with small groups on existing activities using the new tools made available by technology. This is being tried at Bishops and is proving to be a very positive experience .(ie. Language classes, advanced writing, French Student projects, WWW Home page etc.)

Planning Consultation:

This step involves an assessment of training needs. This will be conducted through discussions with teachers and department heads. It is important at this stage that we not only address the technology training needs of the teacher but also the technology needs of the curriculum in each particular subject area. This stage serves to heighten teacher awareness of the potential uses of the technology. During this stage you would attempt to identify possible problem areas as well as identifying possible mentors that can be used to assist other teachers.

Just - in -Time Training :

This concept in training is based on the desire and ability to make training available to teachers as they feel they are ready and able. Assuming the first three stages of the process have been well thought out , a majority of your teachers will be ready to take advantage of this immediately. This training can be best provided if we set aside a space (training room) for teachers to work during free time. The

actual training would be done using a combination of print, video, instructor- led and mentored instruction.

On going support :

This stage involves the building of activities and programs which will support the teachers continued use of technology. Bishops College is setting up a Staff Development Committee, which will examine the issues and attempt to forecast the ongoing needs as well as insure that we stay on top of change as it relates to technology in education. The committee will play an important role at all stages and most especially at this one.

Training Sessions - Exam Week

Training sessions will be conducted during the exam period. The sessions are designed to accommodate a wide range of users. These sessions will be repeated several times over the eight day period. The session will be designed to accommodate up to 10 teachers per session.

DRAFT

Session One - Computer Basics (CB1)

This session will interest the **novice**. Topics covered will include:

- parts of a computer
- basic DOS commands
- loading and saving files
- loading programs
- disk management
- intro to windows and mouse usage

Session Two - Windows (WIN1)

This session will interest the **new** Windows user. Topics covered will include:

- overview of windows (what it does and why)
- Program Manager
- File Manager
- Control Panel
- Accessories

Session Three - Windows (WIN2)

This session will interest the user who is already using but has a few questions about the power of Windows. Topics to be covered include.

- installing new programs
- creating new groups
- editing features (cut, copy, paste) between programs
- multimedia capabilities
- overview of tools suite (Microsoft Office)
- demo of useful Windows applications

Session Four - Word processing (WP1)

This session will interest the beginner. The session will cover the basics of word processing, this session is not intended to focus on a particular word processing package but rather to look at generic word processing skills. Topics to be covered include:

Session Five - Powerpoint Presentation (PP1)

This session will cover the basics of creating a presentation using Powerpoint. Topics will include:

- overview of program
- outlining a presentation
- creating a slide
- editing and adding special effects

*** Session Six - STEM-Net (SN1)**

This session is intended for the new user. Topics covered will include:

- what is STEM-Net/Internet ?
- connecting
 - communications software
 - modems
 - logging in
- basic services available

- Electronic Mail
- Gopher
- Lynx
- TIN

*** Session Seven - STEM-Net II (SN2)**

This session is intended for the teacher who has already used the basic features and would like to know more.

- using E-Mail to send files
- information gathering using Veronica, Archie and Lynx
- file transfer
- posting to newsgroups
- Intro to WWW using Netscape

* if you do not already have a STEM-Net account please see Daphne or Allister for an application.

Session Eight - What's new in the Library ?

This session is intended to familiarize teachers with the electronic resources at the library. Topics include:

- Columbia Database searching
- Electronic Encyclopedias
- Plans for automation

Session Nine - Advanced Internet:

This session will interest the teachers who have considerable experience with the Internet and are ready for something new. The session will cover:

- setting up your computer for SLIP connections
- installing and using various clients
 - Mosaic / Netscape
 - FTP
 - Gopher
- Bishops College WWW initiative.

Professional Development Day - Bishops College

Introduction:

Bishops College has undertaken a major project which will lead to the establishment of the school as an Electronic Learning Center. This project has been ongoing for more than a year. This year we see the completion of the first phase of this project: the installation of the school local area network.

Staff at Bishops College have been preparing for this implementation by participating in training sessions and discussions concerning the integration of technology into the school. This year we are in the process of implementing a comprehensive staff development program.

Staff Development:

The staff development program follows a "Just in Time" model designed to meet individual teacher needs as well as linking training to the curriculum. The past year has seen an increased awareness of the issues and needs of the staff in the area of technology training. Formal processes are now being put in place. This process has started with an identification of areas of training as outlined below.

Areas of Training

- **Basic computer literacy:**
 - Windows
 - School Network
 - File Management
 - Library Access

- **Information technology tools:**
 - Word Processing
 - Database
 - Spreadsheet
 - Presentations
 - Integration of all tools

- **Internet/Information Highway:**
 - Connecting
 - Finding resources
 - World Wide Web

- **Technology in Curriculum Areas:**

- Multimedia
- Hypertext
- Video

The next stage will involve assessment of individual teacher needs and scheduling of appropriate training. An integral part of this process is the training sessions which are scheduled for exam week(see attached list) to be followed by a professional development day in February. The professional development day is geared to coincide with the startup of the school LAN.

Professional Development Day: Proposed Agenda

- Introduction
- Demonstration of the School Network with emphasis on:
 - classroom access
 - administrative issues
 - resource centre access
 - Internet access
- Hands on experience
- Departmental groups brainstorming on possible uses
- Large group reporting and discussion

STEM~Net / Internet Training

Teachers Name: _____ Dept: _____

Teachers are at various levels of preparedness when it comes STEM~Net / Internet usage. To assist in the development of the training program we first need to determine the present and desired level of proficiency for each staff member.

(Check or fill in the appropriate box(es))

- 1 - Beginner - little or no previous experience.
- 2 - User - comfortable with present skill level.
- 3 - Trainer - would be able to help fellow teachers with this topic.
- 4 - Department desired level, to be completed with the Department Head.
- 5 - Training scheduled (date, N/A)

Connecting - This section includes the skills needed to connect and login to STEM~Net.

| Item | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Modem Setup | | | | | |
| Terminal/Communication software | | | | | |
| - DOS and Windows based | | | | | |
| - Slip / TIA connections | | | | | |
| - Winsock configuration | | | | | |
| Login | | | | | |
| Password Maintenance | | | | | |
| Loading and navigating the menu | | | | | |
| Using Telnet at Bishops to connect | | | | | |
| | | | | | |

Electronic Mail - presently one of the most commonly used features on STEM~Net/ Internet, allowing users to keep in touch with fellow teachers and resource people worldwide.

Skills required include the following.

| Item | 1 | 2 | 3 | 4 | 5 |
|--------------------------------|---|---|---|---|---|
| Reading Mail | | | | | |
| Composing and sending messages | | | | | |
| Creating folders | | | | | |

| | | | | | |
|------------------------------|--|--|--|--|--|
| Saving and deleting messages | | | | | |
| Creating signature files | | | | | |
| Attaching files to a message | | | | | |
| Including files in a message | | | | | |
| Exporting a message | | | | | |
| Creating an address book | | | | | |
| Forwarding messages | | | | | |
| | | | | | |

File management - this section covers aspects of managing files that are resident on either your computer or on your account at STEM-Net.

| Item | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| Listing and deleting files on STEM-Net | | | | | |
| Uploading files to STEM-Net: | | | | | |
| - using Kermit protocol | | | | | |
| - using Zmodem protocol | | | | | |
| - using FTP (school site) | | | | | |
| Downloading files from STEM-Net: | | | | | |
| - using Kermit protocol | | | | | |
| - using Zmodem protocol | | | | | |
| - using FTP (school site) | | | | | |
| Converting files for upload | | | | | |
| Zippping and unzipping files (pkzip, unzip etc.) | | | | | |
| | | | | | |
| | | | | | |

File Transfer Protocol (FTP) - this process is used most commonly to retrieve software and data files from other Internet sites worldwide.

| Item | 1 | 2 | 3 | 4 | 5 |
|---------------------------------|---|---|---|---|---|
| Connecting to FTP sites: | | | | | |
| - connecting | | | | | |
| - anonymous login | | | | | |
| - navigating the directories | | | | | |
| - preparing for download/upload | | | | | |
| - downloading/uploading | | | | | |

| | | | | | |
|---------------------------|--|--|--|--|--|
| - logout | | | | | |
| Finding FTP sites using: | | | | | |
| - Archie | | | | | |
| - prepared list (Yannoff) | | | | | |
| - preparing your own | | | | | |
| | | | | | |

Gopher - this is a software program which attempts to organize the resources of the Internet and present them to the user in a menu format.

| Item | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| - starting Gopher | | | | | |
| - navigating the menu | | | | | |
| - reading gopher items | | | | | |
| - using Veronica to search for items | | | | | |
| Options for retrieving(downloading) files | | | | | |
| - mailing files | | | | | |
| - saving files for download | | | | | |
| - using download (kermit, Zmodem etc.) | | | | | |
| | | | | | |

World Wide Web (WWW) - this is possibly the fastest growing feature of the Internet, the Web organizes the resources of the Internet and provides links using Hypertext.

| Item | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| Browsing the World Wide Web using: | | | | | |
| - lynx | | | | | |
| - netscape / mosaic | | | | | |
| Searching the Web using: | | | | | |
| - Webcrawler | | | | | |
| - Net Search | | | | | |
| - School Home Page | | | | | |
| Using files which contain multimedia (sound,video) | | | | | |

| | | | | | |
|---|--|--|--|--|--|
| Saving documents to a disk | | | | | |
| Understanding the addresses | | | | | |
| Netscape/ Mosaic setup | | | | | |
| Creating a document using HTML | | | | | |
| Creating a personal Home Page | | | | | |
| Creating and maintaining a home page for your dept. | | | | | |
| | | | | | |

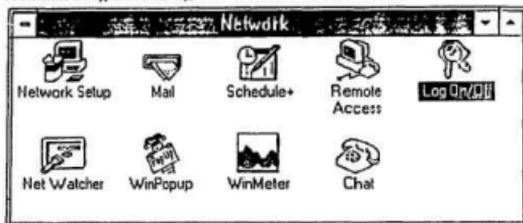
Date Completed: _____

Date Updated: _____

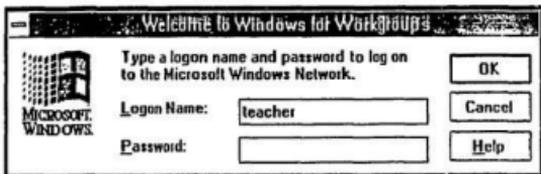
Logging on to Bishops College Main Server - REDBARON

Note: You need to log on to the server to gain access to shared resources

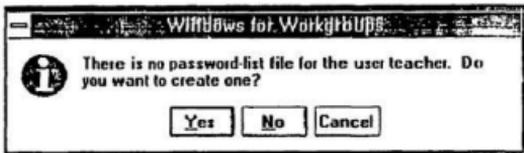
From the Program Manager of Windows select Network



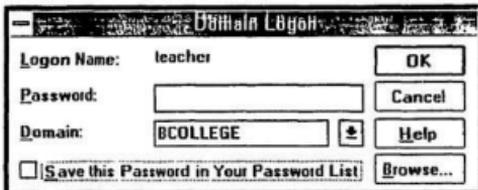
A welcome screen will appear, type name and password.



Note: each time you log into a computer for the first time you will asked if you wish to create a password list file. Select *Yes*



A third (pliew)login screen will now appear, this screen is prompting you to log into the domain (Redbaron). You will need to do this to gain acces to shared resources.



Note: for security purposes it would be wise to not save this password in your password list. You should now be logged on to the network.

It is very important at this stage to change your password

Changing your password

From Main Window choose *Control Panel*

Choose *Network*

Using the arrow to the right of the Workgroup block choose BCOLLEGE

From Options select Password

Microsoft Windows Network

Computer Name: LIBRARY1

Workgroup: BCOLLEGE

Comment:

Logon Status

Not logged on

Default Logon Name:

Options:

Startup Password Event Log

Fill in the blanks with the appropriate answers

Change Logon Password

Change Password for User:

Old Password:

New Password:

Confirm New Password:

Note: It is very important to log off when you leave your terminal unattended.

STEM-Net / Internet Training

Teachers Name: _____ Dept: _____

Teachers are at various levels of preparedness when it comes STEM-Net / Internet usage. To assist in the development of the training program we first need to determine the present and desired level of proficiency for each staff member.

Check or fill in the appropriate box(es)

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|------------------------------------|---|---|---|---|---|
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| - Winsock configuration | | | | | |
| Login | | | | | |
| Password Maintenance | | | | | |
| Loading and navigating the menu | | | | | |
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| Composing and sending messages | | | | | |
| Creating folders | | | | | |

| | | | | | |
|------------------------------|--|--|--|--|--|
| Saving and deleting messages | | | | | |
| Creating signature files | | | | | |
| Attaching files to a message | | | | | |
| Including files in a message | | | | | |
| Exporting a message | | | | | |
| Creating an address book | | | | | |
| Forwarding messages | | | | | |
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| - using Zmodem protocol | | | | | |
| - using FTP (school site) | | | | | |
| Downloading files from STEM~Net: | | | | | |
| - using Kermit protocol | | | | | |
| - using Zmodem protocol | | | | | |
| - using FTP (school site) | | | | | |
| Converting files for upload | | | | | |
| Zippping and unzipping files (pkzip, unzip etc.) | | | | | |
| | | | | | |

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|---------------------------------|---|---|---|---|---|
| Connecting to FTP sites: | | | | | |
| - connecting | | | | | |
| - anonymous login | | | | | |
| - navigating the directories | | | | | |
| - preparing for download/upload | | | | | |
| - downloading/uploading | | | | | |



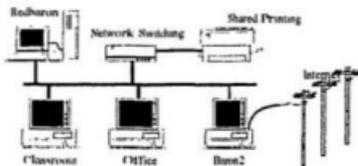
Welcome to Bishops College Computer Network



*From The Classroom
to the
World*



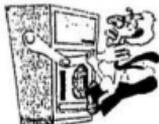
Network Structure



Networking software -- Windows NT

Services

- Shared Software and Files
- Internet Services
- Administration
 - attendance
 - grades
- Curriculum Resources
 - CDROM
 - Library Databases
- Staff Training



Software

- Microsoft Office
 - Word Processor/Write
 - Database Access
 - Spreadsheet/Calc
 - Presentation/PowerPoint
- Internet
 - FTP
 - Telnet
 - World Wide Web
- Multimedia Tools
 - Research project



Training

- Professional Development Day
- Training assessments
- Just in time Training
 - proposed training centre
 - mentoring



Down the Road



- World Wide Web
- Multimedia Teaching Strategies
- Distance Education
- Access from Home
- ????????

Moving and Retrieving a Document

Teachers have access to two directories:

s:\shared directory This directory is shared by all teachers and any teacher can access any file with **read(Look at)** and **write(alter)** privileges

u:\user directory This directory is restricted to the user named. **dbutler** means that only **dbutler** can read/write. This is your personal, private space.

- Log on to your terminal

NOTE: TO SELECT MEANS TO TURN BLUE

- ♣ From Program Manager select Main
- ♣ From Main select File Manager
- ♣ From File Manager select Directory u:\ by clicking on the u button in the Button Bar at the top of your screen
- ♣ Select file *teacher* by double clicking
- ♣ Select your own your name till you turn Blue. Don't hold your breath!!
- ♣ Now Select Directory s:\ by clicking on the s button at the top of your screen
- ♣ In the left hand column Select sub directory *shared*
- ♣ In the left hand column Select sub directory *staff*
- ♣ In the Right hand column Select the file *stpaddy.doc*
- ♣ Move this file by holding down the left hand mouse button and dragging and dropping it in the u button

Before answering the prompt please read the note

Note: This next step is very important when you are dealing with confidential documents. If your name does not appear in the u: file you must choose no and go back to u: and reselect your name

- ♣ You will be asked if you want to copy *stpaddy.doc* to *u:\teacher\your name*

Congratulations!! You have successfully transferred a file

!..Sufic is a curve that sets many things straight

File retrieval

- ♣ Close File Manager by selecting *file* from the menu bar and selecting *exit*
- ♣ From Program Manager select *Microsoft Office*
- ♣ Select *Microsoft Word*
- ♣ From *File* select *Open*
- ♣ From the *Open* window, find the file *u:\teacher\your name\stpaddy.doc* and select it
- ♣ Click on OK to retrieve document.
- ♣ Close this file by selecting *File* then *Close*

Creating and Saving a Document

- * From *File* select *New*
- * You will be prompted to select a format from the new window
- * For most purposes you would choose *normal*. Click OK
- * Create a document which reflects your feelings about March 17 1995
 - * a poem? a letter? an Irish blessing??
- * *One of the key elements is that our creations looks pretty - don't forget to use colour*
*(just a little aside)** "Embrace" right with arms outstretched oh darling I love you aside***
- * To save your document (masterpieces must be preserved) select *File*
- * From *File* select *Save As*
- * From the *Save As* Window, name your file by typing in the blank called File Name
(file names cannot be longer than 8 spaces); select the Path (Drive and Directory) you wish to save your file on and click OK

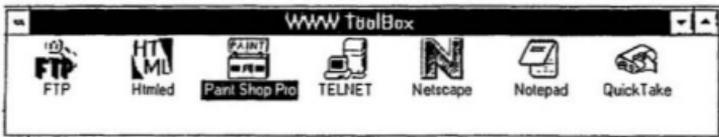
* Congratulations. You have created and saved a document

DO NOT FORGET TO LOG OFF THE NETWORK WHEN YOU ARE

FINISHED

Most kids think all secrets should be tossed

What's in My WWW Toolbox ???



Netscape - World Wide Web browser, just as the name implies it lets you browse the WWW.

Paint Shop Pro - this program is used to work with graphic files such as pictures to be used on your Home Page. You will be able to edit your pictures, convert to different formats (GIF, JPEG etc.) and maybe even remove a few blemishes.

HTML EDIT - this program is used to write your Homepages, the editor automates many of the long drawn out scripting that would otherwise be necessary.

WS-FTP - this program will facilitate the movement of files from your computer to another server(computer), this is important as you compose files on your PC and it will be necessary to run it from the main Web Server (ie. Calvin, Baron2)

Telnet - this program facilitates a connection to another computer, for example " telnet calvin.stemnet " would connect you to the computer "Calvin".

Quicktake - this program allows you to view and do some minor editing on pictures taken with the digital camera (Quicktake 100).

Notepad - this is an electronic notebook you will take on your journey around the Web.

World Wide Web Scavenger Hunt



1. What links does Charlie Marsh have in his home page?
2. What staff member has the best photograph?
3. Whose home page needs to be updated most?
4. What does that tell you about the person?
5. If you were doing a paper on current affairs in a social studies course, what Web site would give you information on Rwanda?
6. How do you get to the Internet from the Bishops home page?
7. What is the population _____ of _____ Country?
8. Use a Search Engine to find an ip address on the subject "vacation"

PowerPoint Presentation

Steps to take when making a Powerpoint presentation:

-  Select Presentation option
-  Select slide style
-  Select "Outline View" button at bottom of your screen
-  Create outline in usual way but remember that this is a slide presentation - don't clutter up your slides with too much text. Explanations of key words should be presented orally:

The following is a sample outline :

CHOOSING A UNIVERSITY

1. Getting information about universities
 - a) Asking friends and teachers
 - b) Consulting guidance counsellor
 - c) Writing for syllabi
2. Reviewing my high school record
 - a) My record in university preparatory subjects
 - b) My extracurricular activities
3. Considering the cost
 - a) University expenses
 - i) Tuition
 - ii) Books
 - iii) Transportation
 - iv) Accommodation
4. Possible financial resources
 - a) Money supplied by parents
 - b) Money in my bank account
 - c) Scholarship possibilities
 - d) Student aid programmes

 When you have your outline developed, you can start to create your slides by choosing the "Slide View" button at the bottom of your screen. You can customize individual slides according to your needs or you can choose a template from the menu.

 Microsoft Office allows you to copy information from one member of its suite to another by cutting and pasting, so your slides can include pictures, sound, video, graphs, and text from other sources. To switch between applications which you have open (eg. Encarta 95, Word, and PowerPoint) Hold down the Alt key and press the Tab key until the application you want appears on the screen then release the Tab key.

 To arrange your slides and apply special effects, choose "Slide Sorter" from the bottom of your screen.

 You also have the option of printing your presentation notes to match your slides. Choose "Notes Page View" from the bottom of your screen.

 To preview / time your presentation choose "Slide Show" from the bottom of your screen.

APPENDIX B

Synopsis of HRD Guidelines
Sample HRD Application Form

**Canada/Newfoundland Cooperation Agreement
on Human Resource Development (HRD)**

Synopsis of Guidelines for Funding Proposals

The Human Resource Development Agreement, signed in 1993, is a five-year federal-provincial agreement administered by the Department of Education and the Atlantic Canada Opportunities Agency. Other sponsors of this partnership include the federal Department of Human Resources Development, the provincial Departments of Industry, Trade and Technology, and Employment and Labor Relations. The purpose of the Agreement is to help the Province to build a stronger economic base by investing in services to students.

The HRD Agreement recognizes that it is our schools which provide the knowledge, attitudes and skills base on which all later qualifications and skill development need to build. Secondly, it recognizes that the contribution of the education system to economic development depends on our ability to develop and continuously upgrade our adult workforce in the face of emerging needs and opportunities. Finally, it acknowledges the importance of utilizing the workplace as a learning environment.

The main goal of the Agreement is to foster a provincial learning culture, a system of continuous learning in which education is valued as an investment. The Agreement contains five major components: learning and enterprise culture, strategic knowledge and skills, capacity building, learning together, research and communications.

The **Learning and Enterprise Culture** component focuses on supporting school improvement efforts, innovative community education, and acceleration of the enterprise education curriculum. **Strategic Knowledge and Skills** will provide incentives to improve performance standards in mathematics, science and technology. The **Capacity Building** component is intended to assist training institutions with program enhancement and staff development. The goal of the **Learning Together** program is to encourage the development of partnerships, including the exchange of staff, between industry and learning institutions. The **Research** component allocates funds for research into human resource issues. Funding from the **Communications** component will be used to provide all stakeholders with timely information about all Agreement programs and activities.

The Agreement recognizes that new technologies are becoming rapidly and readily available both in the home and workplace. It further recognizes that our Province must deliver high quality educational programs with world class standards and expectations. Some specific expectations of the Agreement include the development, within a flexible, student-oriented education system, of a lifelong learning system spanning the continuum from primary to post-secondary school to on-the-job-training. Human resource development practices are also expected to improve, resulting in the development of leadership skills in young people and a more competitive and enterprising industrial sector.

The Human Resources Development Secretariat accepts proposals at any time, provided

that they are properly completed and contain the appropriate signatures. In order to clarify the intent of the proposal and to avoid delays in processing, it is suggested that prospective applicants conduct informal discussions with the HRD Secretariat during the initial stages of proposal development.

Acceptable proposals must clearly articulate the need for the project and must place this need within the framework of the objectives of the Agreement. The proposal must demonstrate that the intended project complements or extends the already existing efforts in the area of the stated need. The ongoing viability of the project must also be addressed. In this regard, the proposal should document the extent of existing and expected future support from relevant community or business organizations.

(Adapted from the Canada/Newfoundland Cooperation Agreement on Human Resource Development, Government of Newfoundland and Labrador, 1992).

Canada/Newfoundland COOPERATION Agreement on Human Resource Development

APPLICATION FORM

 Project No

 Official language preferred for correspondence English French

INSTRUCTIONS

- Complete all sections of this application.
- Sign the Declaration of Applicant on page 3.
- Attach a detailed proposal
(Note: proposal should follow the format suggested on page 4).
- All information provided will be kept confidential.
- Forward completed application and proposal to either the Department of Education or ACOA

IDENTIFICATION OF THE APPLICANT

A. GENERAL INFORMATION

Legal Name of Applicant _____

Telephone _____

Facsimile _____

Mailing Address _____

City/Town _____

Postal Code _____

Contact Person _____

B. TYPE OF ORGANIZATION

- Educational Non-Profit Other (Specify) _____
 Government Industry

C. TYPE OF EDUCATIONAL INSTITUTION (if applicable)

- School College/University Other (Specify) _____
 School Board Private Training Inst.

D. SCOPE OF ORGANIZATION

- Local Provincial International
 Regional National

**PROJECT
INFORMATION**

- A. Title of Project:

- B. Objective/Purpose of the Project:

- C. Brief Project Description:

- D. Location of Project

- E. Estimated number of jobs to be created as a direct result of this project
Full-time _____ Part-time _____
- F. Estimated number of jobs to be created after the completion of this project
Full-time _____ Part-time _____
- G. Project or Activity Period
Estimated Start Date _____ Estimated Completion Date _____
- H. Total Cost of Project \$ _____
Amount Requested \$ _____
- I. Proposal Attached Yes No

**HRD
PROGRAM
CATEGORIES****HRD PROGRAM/S TO WHICH PROJECT APPLICATION IS BEING DIRECTED:**

- LEARNING AND ENTERPRISE CULTURE**
 Building Excellence
 Enterprise Climate
- STRATEGIC KNOWLEDGE AND SKILLS**
 Strategic Skills
 Achievement in Science, Technology and Mathematics
- CAPACITY BUILDING**
 Upgrading Personnel
 Upgrading Technology
- LEARNING TOGETHER**
- RESEARCH AND PLANNING**

DECLARATION OF APPLICANT***TO THE MINISTER FOR THE ATLANTIC CANADA OPPORTUNITIES AGENCY AND THE
MINISTER OF EDUCATION***

- a. The information given in this application is, to the best of my knowledge and ability, complete, true and correct.
- b. I certify that financial assistance from the Human Resource Development Cooperation Agreement is a significant factor in the decision to proceed with this project or activity.
- c. I will provide all information required to complete the assessment of this project and I consent to the Atlantic Canada Opportunities Agency and/or the Department of Education in making any enquiries of such persons, institutions or corporations as deemed necessary in order to reach a decision on this application.
- d. I will instruct the lender as indicated above to provide the Atlantic Canada Opportunities Agency and/or the Department of Education full information concerning my (the Applicant's) operations and financial position. I further authorize the Atlantic Canada Opportunities Agency and/or the Department of Education to discuss fully my (the Applicant's) affairs with the lender.
- e. I understand that failure to provide information or documentation to the Atlantic Canada Opportunities Agency and/or the Department of Education when requested may result in the automatic rejection of this application for financial assistance.

Name and Title of Authorized Official (print)¹

Signature of Authorized Official
(Company Seal if Applicable)

Date: _____

¹ Proposals submitted by schools must be authorized by the board superintendent.

PROPOSAL FORMAT

Applicants are requested to follow the suggested format in developing a proposal. Include any other details and/or documents which, you feel, will provide the Management Committee for the HRD Agreement with a complete understanding of your project or activity.

- RATIONALE**
- fully describe the need which exists.
 - show how the proposed approach will address the stated need.
 - relate the proposed initiative to the aims and objectives of the Human Resource Development Agreement
 - relate the proposed initiative to other activities currently on-going.
- DESIGN**
- state the purpose and objectives of the project
 - describe the methods/procedures to be used
 - provide a detailed action plan
 - if requesting resource materials, attach a list of existing similar materials
- BUDGET**
- provide a detailed balanced budget outlining the total expenditures and anticipated and confirmed sources of revenue of the project
 - provide detailed plans for future funding for the project
- EVALUATION**
- submit an evaluation design

**MAILING
ADDRESSES:**

Government of Newfoundland and Labrador
Department of Education
3rd Floor, West Block, Confederation Building
P. O. Box 8700
St. John's, NF
A1B 4J6

Attention: Manager, Human Resources Development
Cooperation Agreement

Telephone - (709) 729-4310
Facsimile - (709) 729-5896

Atlantic Canada Opportunities Agency
P. O. Box 1060
Station C
St. John's, NF
A1C 5M5

Attention: Manager, Human Resources Development
Cooperation Agreement

Telephone - (709) 772-2452/2458
Facsimile - (709) 772-2712



